

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT Application of:

PERHOLTZ, Ronald J.

Appl. S.N.: 10/032,325

Filing Date: March 4, 2002

Confirmation No.: 6319

Attorney Docket: 2540-0550

Group Art Unit: 2145

Examiner: SWEARINGEN, Jeffrey

Title: **SYSTEM AND METHOD FOR REMOTE
MONITORING AND OPERATION OF
PERSONAL COMPUTERS**

Date: September 10, 2009

APPEAL BRIEF

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated September 12, 2008, in support of its appeal, Applicant respectfully submits this Appeal Brief in compliance with 37 C.F.R. 41.37 including sections set forth in the order specified in 37 C.F.R. 41.37(c)(1).

(i) Real Party in Interest

As evidenced by the assignment recorded at reel 014007/frame 0899, the real party in interest for this appeal is: Avocent Huntsville Corporation having a principal place of business at 4991 Corporate Drive, Huntsville, AL 35805.

(ii) Related Appeals and Interferences

No prior and pending appeals, interferences or judicial proceedings are known to appellant, the appellant's legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

(iii) Status of claims. A statement of the status of all the claims in the proceeding is as follows:

Claims 1-21 (Pending)
Claims 22-122 (Canceled)
Claims 123-128 (Pending)
Claims 129-135 (Canceled)
Claims 136-140 (Pending)
Claims 141-143 (Canceled)
Claims 144-162 (Pending)
Claims 163-164 (Canceled)
Claims 165-170 (Pending)
Claim 171 (Canceled)
Claims 172-183 (Pending)
Claims 184-185 (Canceled)
Claims 186-190 (Pending)
Claims 191-192 (Canceled)
Claims 193-226 (Pending)
Claims 227-238 (Canceled)
Claims 239-246 (Pending).

Claims 123-128, 136-140, 144-162, 165-170, 172-183, 186-190, 193-226 and 239-246) are rejected. Claims 1-21 are indicated as allowed.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The claims that are being appealed are: claims 123-128, 136-140, 144-162, 165-170, 172-183, 186-190, 193-226 and 239-246.

(iv) Status of amendments

The Amendment filed May 11, 2009 has not been entered. No other amendments after final or after filing a notice of appeal have been denied entry. It is respectfully submitted that the Amendment filed May 11, 2009 should have been entered as it was not after a final rejection and was in compliance with 37 C.F.R. §§ 1.116 and 41.33 for amendments after filing of a notice of appeal but before the filing of an appeal brief. As described in the Amendment filed May 11, 2009:

The amendments contained in this response [i.e., the May 11, 2009 Amendment] are compliant with 37 CFR § [1.]116 because the response cancels claim 190, and presents the other amended claims better form for consideration on appeal. In particular, the amendments to claims 169, 170, 193, 198, 211, 212, 220, and 221 correct informalities such as lack of antecedent basis, and internal inconsistencies within a claim. In addition, no claim amendments could have been presented earlier in response to the prior art rejections because those rejections were made for the first time in the September 12, 2008 office action.

More specifically, while the amended claims would have been understandable to those of ordinary skill in the art based on the other language in those claims, Applicant has attempted to make the claims in better form for appeal as the scope of those claims is further clarified. For example, claim 169 changed “target computer” to “remote workstation” to render the claim more self consistent in light of the fact that the “contents

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

of the keyboard/mouse buffers” are received from the remote workstation and not the target computer. Similarly, with respect to claim 170, the amendment addresses the antecedent basis issue of “host computer” and simply states that the contents of those keyboard/mouse buffers are forwarded to the target computer.

The change to claim 193 provides better antecedent basis as a “connection utility” rather than a “communication utility” is previously recited. Claim 198 also avoids an antecedent basis issue as “a remote location” was not previously recited.

Claims 211 and 221 changed “digital to analog conversion of host video signals” to “analog to digital conversion of host video signals”, but those of skill in the art would have known that the latter was intended since the claims later recite digitized video signals. Claim 212 was amended to change “video input signals” to “video signals” for antecedent basis issues in light of the previous recitation of “video signals.” Claim 220 was amended to change “between” to “for” in light of the other elements of the claims.

Thus, it is respectfully requested that the amendments be indicated as entered for purposes of this appeal.

(v) Summary of claimed subject matter

A concise explanation of the subject matter defined in each of the independent claims involved in the appeal, which shall refer to the specification by page and line number, and to the drawing, if any, by reference characters is provided below.¹

As described in the specification,² a number of systems were known for remotely controlling a computer, and the technology described in the application improved upon

¹ There are no rejected claims to be interpreted under 35 U.S.C. 112, sixth paragraph, therefore, no identification of the structure, material, or acts described in the specification for such elements is required.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

those systems by allowing greater control over the computer being controlled. The paragraph crossing cols. 1 and 2 states:

In many cases control of a PC is not always practical or possible remotely. Many PC based application software systems take over a PC completely and, due to memory restrictions or other processing conflicts, cannot co-exist with those software systems permitting Remote PC access. Moreover, even in cases where the required Host and Remote access interface software has been successfully installed, if the Host processor should lock-up or otherwise fail, remote users immediately lose their ability to access the Host system. In such cases the Remote user would not be able to remotely access information displayed on the Host PC's VDM³ screen after the lock-up occurred. Information displayed on the VDM screen, however, usually indicates why the failure occurred and the status of processing at the point of failure, and therefore can be particularly useful in analyzing the PC failure and in preventing future similar failures.

Col. 2, lines 43-55, reiterates the need for the technology described in the application and states:

Many PC users need to remotely monitor and control another PC, where, due to processing restrictions or limitations, it may not be possible to use the PC's processor to access a particular PC remotely. For example, for security reasons, a bank may wish to discreetly monitor PC usage by tellers or loan officers from a central, off-site location. As a second

² As the present application is a reissue application, column numbers and line numbers will be used to refer to the various portions of the specification cited herein.

³ VDM is an abbreviation for "Video Display Monitor." See col. 1, lines 29-30.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

example, a Network Manager may wish to periodically remotely monitor and control the activities of a dedicated network file server or tape backup workstation. As a third example, unskilled on-site PC users may need a simple means to permit PC maintenance personnel to have extensive remote access to their PCs, and particularly to a network file server, in the event of trouble or failure.

As such, the technology of the application is shown generally in Fig. 1 and described generally in the Field of the Invention, col. 1, lines 12-23, which states:

The present invention relates generally to a method and apparatus for personal computer (PC) monitoring and control and more specifically to a method and apparatus for enabling a PC to which the apparatus is connected (hereinafter referred to as a "Host" PC) to be accessed, restarted, operated and/or controlled remotely by another PC (hereinafter referred to as a "Remote" PC) using standard public utility telephone lines or direct cabling. The invention further permits a Remote PC to access Host processing status information and/or restart (i.e., reboot) the Host PC without Central Processing Unit (CPU) support from the Host PC. Col. 5 describes connecting the Host PC and Remote PC and states:

The connection between a Host PC and Remote PC can be accomplished through either of two means. As a first means, a modem is connected to the Remote PC's serial interface port and a compatible modem is connected to a data interface port on the Host Unit. On this basis, a Remote PC could communicate with a Host site via a standard telephone

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

line linkage between the two modems. This means is hereinafter referred to as a "Modem Linkage". (Lines 23-30.)

...

The Host Unit contains its own microprocessor (or other computing circuitry) designed to capture, interpret and store information displayed on a Host PC's VDM screen from the video raster signal output of the Host PC's VDAC (i.e. a video raster signal is that video output signal of a VDAC which serves as direct input into a VDM). VDM screen data collected in this manner permits a Remote user to access, obtain, view, and store Host PC current and previous VDM screen data on a Remote PC after linking the Remote PC to the Host Unit. VDM screen data captured, interpreted and stored by a Host Unit from the Host PC's VDAC raster output may be either text or graphics (i.e. image) based and may be in either color or monochrome. (Lines 41-52.)

Claim 123

Turning to each of the independent claims, independent claim 123 recites a computer monitoring system. Generally an exemplary computer monitoring system is shown in Fig. 1 and includes a remote site 1 (including a Remote PC processor 2 connected to a display monitor 3 and an input device, such as a keyboard 4 and/or a mouse 4a) which is connected by a network (e.g., a telephone network) to a host system having a host PC 10 that is to be controlled by the Remote PC processor 2.⁴ By utilizing

⁴ Citation to any particular section as an exemplary disclosure is not intended to mean that other portions of the specification do not also teach the same element or step. 37 CFR 41.37 requires a "concise" explanation that is not

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a pop-up screen on the remote display device, the user of the remote PC processor can select which host system to connect to via the network.

As recited in claim 123, the computer monitoring system includes “plural host computer sites, each host computer site having at least one host computer, the at least one host computer including a host processor, a host input device, and a host display device.” Fig. 1 shows a single illustrative host computer site, but col. 6, lines 26-35, states that “Software installed on the Remote PC permits … (3) maintaining a list of Host Units that may be accessed from the Remote PC (including the dialing information needed to call the Host modem that is used to access each Host Unit (when in a Modem Linkage mode), the ID number for each Host Unit, and the password needed to access each Host Unit).” Similarly, col. 14, lines 11-15, states “Software installed on a Remote PC (provided with the apparatus) permits a Remote PC to access more than one Host Site, but access to one Host site must be ended before access to another Host site can begin (i.e. no more than one Host Site may be accessed at a time).”

The computer monitoring system also includes “a remote processor situated at a remote site, the remote processor having a remote display device and a remote input device connected thereto.” For example, as shown in Fig. 1, the remote site 1 includes a video display 3 and a keyboard 4 and/or a mouse 4A.

The computer monitoring system also includes “a network linking the remote site and each of the plural host computer sites, the network facilitating a first connection between a first selected host computer at a first host computer site and the remote site.” Fig. 1 shows, for example, a telephone network being used to connect a remote site 1 and a host system 6. Claim 123 further recites that the network “during the first connection

conducive to listing all such citations. Additional support for claims 123-128, 136-140, 144-162, 165-170, 172-183, 186-190, 193-246 can be found in the arguments section of the Amendment filed December 12, 2003.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

either: (a) transmitting screen data from the host display device of the first selected host computer to the remote display device, and (b) transmitting input signals from the remote input device to the first selected host computer for controlling the first selected host computer.” Col. 13, lines 45-49, describes part (a) and states “A second microprocessor, memory storage and software also exists in each Host Unit. The primary purpose of this microprocessor and related operating system software is to capture, decode, store and *transmit* individual Host PC VDAC data to a Remote PC.” (Emphasis added.) Col. 6, lines 26-47 describes part (b) and states “Software installed on the Remote PC permits … (8) switching the Remote PC’s keyboard and/or mouse from use as a normal Remote keyboard and/or mouse to use as the keyboard and/or mouse for the Host PC.”

Claim 123 further recites “an on-screen display process, execution of the on-screen display process at the remote site providing a pop-up screen on the remote display device, the pop-up comprising a menu identifying the host computers at the plural host computer sites, the pop-up screen at least overlaying the video appearing on the remote display device as a result of the first connection.” Col. 44, lines 16-25, describes such a process and states “When the program is first invoked, a System Main Menu is displayed 701 with three processing options. … The second menu option "Call Host Site" 703 permits the user to cause their Remote PC to call and link to a desired Host PC. When this menu option is selected, a call list of Host Units that may be selected is displayed 704.” Col. 48, lines 47-50, states “When a user is in a Host mode and presses the left Shift key three times within two seconds, the user is returned to the System Main Menu 741. This menu and other menus pop-up (i.e. overlay) over a portion of the Host PC’s screen.”

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 123 further recites “whereupon operation of the remote input device in response to the menu of the pop-up screen causes the remote site to terminate the first connection and to establish a second connection between a second selected host computer and the remote site.” Col. 14, lines 11-15, states “Software installed on a Remote PC (provided with the apparatus) permits a Remote PC to access more than one Host Site, but access to one Host site must be ended before access to another Host site can begin (i.e. no more than one Host Site may be accessed at a time).”

Claim 136

Claim 136 generally recites a computer monitoring system that can interface with both digital inputs (e.g., keyboard data) and analog inputs (e.g., analog video data). Claim 136 recites a “system for interfacing digitized keyboard signals with a computer processor generating analog video signals” and also relates to remote monitoring of a computer system. Claim 136 recites “a remote access facility,” such as elements of the remote site 1. As shown in Fig. 1, the remote site 1 includes a video display 3 and a keyboard 4 and/or a mouse 4A.

Claim 136 also recites “a non-dedicated serial channel,” such as would include a modem-to-modem communication channel used with a telephone system. Fig. 1 shows, for example, a telephone network being used to connect a remote site 1 and a host system 6.

Claim 136 also recites “a computer access interface receiving from the remote access facility via the non-dedicated serial channel the digitized keyboard signals and transmitting to the remote access facility via the non-dedicated serial channel a digitized version of the analog video signals, wherein the non-dedicated serial channel is between

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

the remote access facility and the computer access interface.” Fig. 3 shows a computer access interface including a data in port 70 (over which keyboard signals are received) and a VGA In input 65 which receives video signals. Col. 16, lines 44-52, states “VGA In 65--For Host PC's with a VGA mode VDAC, one end of the 15 pin male to male VGA video interface cable (supplied as part of the apparatus) is plugged into this receptacle and the other end of the cable is plugged into the Host PC's VDAC receptacle. This cable interface permits the Host Unit to capture the video output signal from the Host PC's VDAC and pass the signal out through the VGA Out 64 receptacle to the Host PC's VDM.” Col. 23, lines 1-5, describes that the video signals on the 15-pin video connector are analog when it states “The video input enters from the Host PC's VDAC, through a video interface cable which is presently either a DB 9 pin receptacle (with TTL video signals) or a DB 15 pin receptacle (with analog video signals) located on the rear panel of the Host Unit (see FIG. 3 at references 65 or 67).”

Claim 157

Claim 157 is directed to a host unit that provides video display capability and the ability to reset a host computer upon receiving a command when requested to do so. Claim 157 recites “A system for monitoring a host computer from a remote processor the host computer including a host processor and a host display device port and the remote processor including a remote display device.” An exemplary system is generally shown in Fig. 1 as described in col. 5, lines 17-22.

Claim 157 also recites “a host unit connected between the remote processor and the host computer which (1) causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset

Application of: Perholtz, R. and Elmquist; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

operation appears at the host unit and (2) upon receipt of a reset command, causes the host unit to initiate a reset operation of the host computer." An exemplary system is generally shown in Fig. 1 and described generally in the Field of the Invention, col. 1, lines 12-23, which states:

The present invention relates generally to a method and apparatus for personal computer (PC) monitoring and control and more specifically to a method and apparatus for enabling a PC to which the apparatus is connected (hereinafter referred to as a "Host" PC) to be accessed, restarted, operated and/or controlled remotely by another PC (hereinafter referred to as a "Remote" PC) using standard public utility telephone lines or direct cabling. The invention further permits a Remote PC to access Host processing status information and/or restart (i.e., reboot) the Host PC without Central Processing Unit (CPU) support from the Host PC.

As described in the paragraph crossing cols. 1 and 2, the deficiency in other systems of not being able to see the information associated with why a restart is required is very problematic. That paragraph states:

even in cases where the required Host and Remote access interface software has been successfully installed, if the Host processor should lock-up or otherwise fail, remote users immediately lose their ability to access the Host system. In such cases the Remote user would not be able to remotely access information displayed on the Host PC's VDM screen after the lock-up occurred. Information displayed on the VDM screen, however, usually indicates why the failure occurred and the status of processing at the point

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

of failure, and therefore can be particularly useful in analyzing the PC failure and in preventing future similar failures.

Claim 160

Claim 160 recites a method of monitoring a computer system, and includes “providing a host unit between a host computer and a remote processor; the host computer including a host processor and a host display device port, the remote processor including a remote display device.” An exemplary system with such a configuration is shown in Fig. 1.

Claim 160 also recites “using the host unit to cause screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit.” The last full paragraph of col. 6 states “Software installed on the Remote PC permits ... (13) switching the Remote PC’s VDM screen from a normal (i.e. Remote) VDM screen mode to a Host screen mode where a Host PC’s VDAC output data is captured (without Host PC CPU support) and transmitted by the Host Unit to the Remote PC and is displayed on the Remote PC’s VDM screen.”

Claim 160 further recites “receiving a reset command at the host unit and thereupon causing the host unit to initiate a reset operation of the host computer.” The paragraph crossing cols. 5 and 6 states “the invention permits a Remote PC to ... (4) cold boot a Host PC, when necessary by instructing the Host Unit to temporarily cut the AC power to the Host PC forcing it to perform a cold boot.” Col. 49, lines 41-57, also describes the reset process and states:

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The Cold Boot Host 729 connection menu option is selected to temporarily interrupt all AC power to the active Host PC for approximately 15 seconds. ...

When this menu option is selected, the cold-boot request must be confirmed by entering "Y" in response to the question "ARE YOU SURE? (Y/N)" 730. ... If "Y" is entered, the Remote PC sends instructions to Host Unit to temporarily cut AC power to the Host PC for approximately 15 seconds. Once the power is restored, the Host PC reboots, the Host Unit returns a confirmation to the Remote PC that the cold boot process has been completed and processing returns to the Connection Options Main Menu 720.

Col. 12, lines 24-32, discloses "AC power to the Host PC may be temporarily cut by the Host Unit when instructed by a remote user's Remote PC to force a locked-up Host PC to cold-boot, so that normal Host PC processing can be restored remotely. This "cold-boot" procedure is particularly useful when the Host PC will no longer respond to any keyboard or other input. The Host PC is turned off and back on by the remote user, thereby reinitializing the Host PC's processing circuitry."

Claim 165

Claim 165 recites a system that enables remote monitoring of a host computer and control of that host computer by sending the host computer keyboard signals to control the host computer. See generally Figures 1, 3, 4A and 5C.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 165 recites “a user station” that includes various elements described below. Claim 165 recites “an analog video source generating analog video signals.” As shown in Figure 1, a host PC computer generates analog video signals” which are received by a host unit that in turn outputs them through “an analog video port exhibiting the analog video signals” which is connected to “a video display connected to the video port to retrieve from the port the analog video signals and to display the retrieved analog video signals.” See also Fig. 3. This enables a user of the host computer to see the output of the host computer even when it is connected to a host unit. As shown in Figure 4, within the host unit there is “a video processor to receive, digitize and packetize the analog video signals into packeted digital video signals.” As shown in Figure 1, the host unit is connected to “a network connector to establish a logical digital data path from the user station to a remote station and to deliver the packeted digital video signals onto the established logical digital data path.” Figure 5C also shows paths between a host unit, a remote unit and a host computer. See also Figure 3 for the various ports of the host unit, including “a keyboard port for keyboard signals, the network connector also delivering keyboard signals from the remote station to the keyboard port via the established logical digital data path” and “a mouse port for mouse signals, the network connector also delivering mouse signals from the remote station to the mouse port via the established logical digital data path.” Claim 165 further recites “a processor to retrieve the keyboard and mouse signals from the remote station and to instruct the analog video source to generate new analog video signals based on the retrieved keyboard and mouse signals.” As shown in Figure 5C, a host unit retrieves mouse signals that are passed on to the host computer. Figure 4 shows the CPU of the host unit.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Unamended Claim 169

Claim 169 recites “A system for controlling a target computer from a remote workstation of the type that includes a keyboard, a mouse, and a monitor” as shown in an exemplary embodiment in Figure 1. Figure 1 also shows the claimed “a host processor” which includes “associated video memory and keyboard/mouse buffers.” Claim 169 further recites “a video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory.” Col. 24, lines 6-9, states “The VGA Color Select 255 signal causes the Analog to TTL Circuitry 253 to select a particular analog signal (i.e. red 250, green 251, or blue) 252, to be converted to a TTL output 254.” See also Fig. 4G.

Claim 169 also recites “a keyboard/mouse interface that receives keyboard and mouse signals from the remote workstation and stores them in the keyboard/mouse buffers.” As shown in Fig. 3, the host unit includes a data in interface 70 that receives keyboard data from a remote unit. The specification describes the buffering by describing the multiple stages that the keyboard signals go through and compares it to the internal keyboard processing of the host unit. The paragraph crossing cols. 38 and 39 states “The Control CPU's keyboard interface emulates the Host PC's keyboard. Keyboard signals (either from the keyboard or the Control CPU) pass through two stages before reaching the application program running on the Host PC. ... This interrupt invokes a BIOS routine which translates the scan code to an ASCII (or extended) character code and places it in a buffer for use by the current application.”

Claim 169 further recites “the host processor operating a remote access and control program that transmits the contents of the video memory to the remote workstation and receives the contents of the keyboard/mouse buffers from the target

computer, both over a communication link.” As shown in Fig. 5C, a host unit sends video data to a remote workstation, and receives keyboard and mouse data from a remote workstation. Although the claim states “the host processor … receives the contents of the keyboard/mouse buffers from the target computer,” one of ordinary skill in the art would have understood the claim to mean “the host processor … receives the contents of the keyboard/mouse buffers from the remote workstation” in light of the direction of the flow of those signals “over a communications link.”

Claim 177

Claim 177 describes that not all video sources may have the same screen resolution, and that the system allows the proper resolution to be detected so that the video signals can be synchronized and sampled. Claim 177 recites “A video digitizer for receiving analog video signals at a plurality of resolutions and for storing the video signals in a video memory of a host computer.” Col. 29, lines 57-60, states “The polarity of the vertical and horizontal sync signals change, as well as their relationship to each other, depending on the VDAC in use and the particular video mode (e.g. text or graphics modes). As shown in FIG. 4P., references 490 and 491 show example Vertical Synchronization (Sync) 490 and Horizontal Synchronization (Sync) 491 signals.” Claim 177 further recites “a synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal. Col. 29, lines 27-38, recites “The current implementation of the Pixel Timing Circuit 112 (FIG. 4A) is shown in FIG. 4O. . . The horizontal sync signal clears the address counter via the clear line 485.” Claim 177 also recites “a microprocessor that determines a clocking rate at which the analog video signal should be sampled from the timing of the vertical and horizontal

synchronize signals.” With reference to Fig. 4O, col. 29, lines 41-47, states “The current implementation of the Pixel Timing Circuit 112 (FIG. 4A) is shown in FIG. 4O. Presently, this circuit is a 4K by 8 bit 20 nanosecond RAM memory. The Video CPU 114 (FIG. 4A) programs this memory via the data in 470, and the write line 477. This memory is addressed by the output 483 of a 12 bit counter 484. First, this counter 484 is cleared via reference 485 and, after each write pulse, increments the address counter via reference 486.... The horizontal sync signal clears the address counter via the clear line 485. The output byte of the RAM memory 471 is split into two 4 bit nibbles 472 and 479 and are loaded into two 4 Bit Shift Registers 473A and 480. A 90 megahertz Oscillator 489 clocks these shift registers and ...[t]he two shift registers then output each 4 bit nibble one bit at a time at references 473B and 481 to generate the Pixel Clock signal 476.” Col. 41, lines 18-21, further discloses “the training process continues to capture the video, ... and begins adjusting the pixel clock timings using the columns in the vertical line between 685 through 687.”

Claim 177 further states “a clock signal generator that produces a clock signal at the clocking rate.” With reference to Fig. 4O, col. 29, lines 41-47, states “A 90 megahertz Oscillator 489 clocks these shift registers and ... [t]he two shift registers then output each 4 bit nibble one bit at a time at references 473B and 481 to generate the Pixel Clock signal 476.” Figure 4G illustrates “an analog to digital converter that is controlled by the clock signal to sample the analog video signal.”

Claim 177 further recites “a bus interface circuit that writes the samples of the analog video signal into the video memory of the host computer.” Col. 26, lines 15-19, discloses “Once in the Video Output Buffer 115 (FIG. 4A), the digitized video data can be transferred, through the Control CPU 106 (FIG. 4A) and out the Remote Data

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Circuitry 103 (FIG. 4A) to a Remote PC 2 (FIG. 1), which can then be directly displayed in graphics mode.”

Claim 186

Claim 186 recites “A system for interfacing keyboard signals with a selected computer processor generating video signals.” See Fig. 1. Claim 186 further recites “an on-screen display generator to create a menu for a monitor associated with the keyboard signals, said menu listing the selected computer processor among a plurality of other computer processors for selection by a user of the monitor.” Col. 44, lines 16-25, describes such a display and states “When the program is first invoked, a System Main Menu is displayed 701 with three processing options. ... The second menu option "Call Host Site" 703 permits the user to cause their Remote PC to call and link to a desired Host PC. When this menu option is selected, a call list of Host Units that may be selected is displayed 704.”

Claim 186 further recites “a network access device to interface with a network including the plurality of computer processors and the selected computer processor.” Fig. 1 shows a single illustrative host computer site connected by a modem, but col. 6, lines 26-35, states that “Software installed on the Remote PC permits ... (3) maintaining a list of Host Units that may be accessed from the Remote PC (including the dialing information needed to call the Host modem that is used to access each Host Unit (when in a Modem Linkage mode....” Similarly, col. 14, lines 11-15, states “Software installed on a Remote PC (provided with the apparatus) permits a Remote PC to access more than one Host Site, but access to one Host site must be ended before access to another Host site can begin (i.e. no more than one Host Site may be accessed at a time).” See also Fig. 5C.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 186 recites “a video interface to receive information indicative of the video signals from the network via the network access device.” As shown in Fig. 5C, remote PC 630 includes such a video interface.

Claim 186 recites “a keyboard interface to read the keyboard signals and to deliver the keyboard signals to the selected computer processor via the network and the network access device.” As shown in Fig. 5C, remote PC 630 includes such a keyboard interface.

Unamended Claim 193

Claim 193 recites a system including a remote site computer, a host computer and a hardware unit, such as is shown in the exemplary embodiment of Fig. 1, and having a menu to use to select which host computer to connect the remote site computer to. As recited in claim 193, “a hardware host unit [is] coupled to a host computer different from the hardware host unit.” For example, a host unit 00 is coupled to a host PC processor 10 that is different from the host unit 00. Claim 193 also recites “a remote computer software utility, located at a remote site computer.” The utility includes two functional parts: “a connection utility to establish a communication session with the host unit over a communication link” and “a pop up menu utility providing at least a user choice at the remote site computer to obtain access to the host computer via the communication utility” -- which would have been understood by those of ordinary skill in the art to refer to the previously recited “connection utility.” Col. 6, lines 26-35, states that “Software installed on the Remote PC permits ... (3) maintaining a list of Host Units that may be accessed from the Remote PC (including the dialing information needed to call the Host modem that is used to access each Host Unit (when in a Modem Linkage mode....” Similarly, col. 14, lines 11-15, states “Software installed on a Remote PC (provided with

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

the apparatus) permits a Remote PC to access more than one Host Site, but access to one Host site must be ended before access to another Host site can begin (i.e. no more than one Host Site may be accessed at a time).” Also, col. 44, lines 16-25, states “When the program is first invoked, a System Main Menu is displayed 701 with three processing options. … The second menu option “Call Host Site” 703 permits the user to cause their Remote PC to call and link to a desired Host PC. When this menu option is selected, a call list of Host Units that may be selected is displayed 704.” Col. 48, lines 47-50, states “When a user is in a Host mode and presses the left Shift key three times within two seconds, the user is returned to the System Main Menu 741. This menu and other menus pop-up (i.e. overlay) over a portion of the Host PC’s screen.”

Claim 204

Claim 204 recites “A method of converting the information contained in a video raster signal generated by a data processing device and displayed on a video display terminal associated with the data processing device, into a digital representation of that information for monitoring the information,” for example as one might use when remotely monitoring or controlling a data processing device remote from a user that wishes access to that information. Claim 204 recites “receiving the video raster signal; and converting the video raster signal into a digital signal representative of the information contained in the video raster signal independently from the data processing device.” The abstract describes such a process and states “A system and method [are described] for accessing, controlling and monitoring a data processing device in which a video raster signal from the data processing device is analyzed to determine the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

information displayed on a video display monitor attached to the data processing device is used.”

Claim 211

Claim 211 is directed to a circuit module such as can be used in a remote monitoring system described in the specification. Claim 211 recites “A circuit module for a computer having in operation therein a remote access engine to communicate between a host server and a remote workstation.” See Figure 4A that shows a circuit with two separate controllers (106 and 114) for receiving video, storing the video in a video buffer, receiving mouse information from mouse circuitry 117 and transmitting information identifying the video, mouse and keyboard signals to the remote access engine.

In general, col. 22, lines 56-67, discloses “As shown in FIG. 4A, the Video CPU 114 programs the video circuits 110, 112, 113 after which video signals, including video raster signals, coming from the Host PC VDAC (discussed in more detail in FIG. 4G) are processed by the Video Signal Input Circuitry 110 and the Video CPU 111. The resulting video data is written to the Video Output Buffer 115. In the preferred embodiment, this buffer is 32K by 16 bits, which is enough memory to hold one screen of 800 by 600 digitized graphics or more than one screen of text data. The Video Processor 111 writes to this Video Output Buffer 115, so that the data written to the buffer can be read by the Video CPU 114.” Also, col. 18, lines, 46-51, describes “The Video CPU 114 controls the video circuitry (i.e. blocks 110-113 and 115), interface to the Host PC's Data Circuitry 116, and interface to the Host PC's Mouse Circuitry 117. The Host Data 116 and Mouse

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Circuitry 117 interfaces between the Host Unit and Host PC occur using the Host PC's serial interface port."

Claim 212

Unamended Claim 212 recites "A remote access system communicating with a digital network transmission medium to communicate user input signals from a remote computer to a host computer via the transmission medium and video signals from the host computer to the remote computer via the transmission medium." Such a system may be used in a remote monitoring environment, as described above, when a host computer has stopped responding to user input.

Claim 212 recites "a user input process to capture the user input signals for digital transmission to the host computer" and "a video process to capture the video input signals, digitize them and format them for transmission to the remote computer, even when the host computer has locked up to no longer accept any user input signals." Col. 10, lines 19-28, discloses:

Yet another object of the present invention is to allow a user to view the information on the video display terminal even if the data processing device at the second location is locked up and no longer processing data or input commands.

A still further object of the present invention is to allow the user at the first location to give commands to the data processing device at the second location in such a manner that the data processing device perceives the commands as coming from a standard input device typically attached to the data processing device such as a keyboard or mouse.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 212 also recites “a standard remote access engine: to communicate the user input signals on the transmission medium between the host and remote computers, and to communicate the video signals, in digital format, on the transmission medium between the host and remote computers, even when the host computer has locked up to no longer accept any user input signals.” Col. 10, lines 19-22, discloses “Yet another object of the present invention is to allow a user to view the information on the video display terminal even if the data processing device at the second location is locked up and no longer processing data or input commands.”

Claim 213

Claim 213 recites “A circuit module for a computer having in operation therein a remote access engine to communicate between a host server and a remote workstation.” As was discussed above with respect to claim 211, Figure 4A that shows a circuit with two separate controllers (106 and 114) for receiving video, storing the video in a video buffer, receiving mouse information from mouse circuitry 117 and transmitting information identifying the video, mouse and keyboard signals to the remote access engine. As shown in Figure 4P-2, “sync polarity circuits” receive, respectively, horizontal and vertical sync signals from the host server. Also, as described above with respect to claim 177, synchronization circuits are used when determining the graphics mode of the host computer. Col. 29, lines 57-60, states “The polarity of the vertical and horizontal sync signals change, as well as their relationship to each other, depending on the VDAC in use and the particular video mode (e.g. text or graphics modes). As shown in FIG. 4P., references 490 and 491 show example Vertical Synchronization (Sync) 490 and Horizontal Synchronization (Sync) 491 signals.” Claim 177 further recites “a

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal. Col. 29, lines 27-38, recites “The current implementation of the Pixel Timing Circuit 112 (FIG. 4A) is shown in FIG. 4O. … The horizontal sync signal clears the address counter via the clear line 485.”

Claim 220

Unamended Claim 220 recites “A computer having a virtual path communication link with a remote computer over a network medium” including “a remote access engine,” “a data bus,” “a set of circuit modules … to digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus” and “a communication port … to deliver the selected digitized video signals to the remote computer for display.” As discussed above with respect to claim 211, circuit modules can be used to handle video digitization and communication such that a host computer can be remotely monitored. Col. 10, lines 19-40, discloses:

Yet another object of the present invention is to allow a user to view the information on the video display terminal even if the data processing device at the second location is locked up and no longer processing data or input commands.

A still further object of the present invention is to allow the user at the first location to give commands to the data processing device at the second location in such a manner that the data processing device perceives the commands as coming from a standard input device typically attached to the data processing device such as a keyboard or mouse.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

...

Yet another object of the present invention is provide a system and method in which video display information contained in a video raster signal output from a video display circuit of a data processing device is analyzed to determine the content of the signal and to convert the signal into a form suitable for transmission over a standard public telephone line or other communications network.

Claim 222

Claim 222 recites a remote monitoring system with increased security by utilizing caller ID information to determine if a caller is authorized to use the host unit being called. Claim 22 recites “a remote access controller, including a remote access control card communicating with the telecommunications link, to read a present caller ID associated with the remote location, to store a list of predefined caller IDs, to compare the present caller ID with the list and to disable the remote access engine whenever the present caller ID fails to match any from the list of predefined caller IDs.”

Claim 239

Claim 239 recites “A circuit for communicating RGB video information from a Host computer to a remote computer via a network link” that utilizes a palette converter to convert an RGB color value into a palette index before sending the video information across the network.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 241

Claim 241 recites “A remote access PC to facilitate communications between a host computer and a remote computer distantly located relative to each other” that includes “a remote access process to establish a logical data path between the host computer and the remote computer.” Also, the PC comprises “a control module having an AC power input to receive AC power from an external power source, an AC power output to deliver the AC power from the external power source to the host computer, a switch therebetween, and a control data input to receive a reboot signal and thereupon interrupt AC power to the host computer by operation of the switch; [and] a communication circuit establishing a different logical data path between the remote computer and the communication circuit, the communication circuit delivering the reboot signal to the control module when commanded to do so by the remote computer via the different logical data path.”

As discussed above with respect to claim 160, a user may need to remotely reboot a computer connected to a host unit. The paragraph crossing cols. 5 and 6 states “the invention permits a Remote PC to … (4) cold boot a Host PC, when necessary by instructing the Host Unit to temporarily cut the AC power to the Host PC forcing it to perform a cold boot.” Col. 49, lines 41-57, also describes the reset process and states:

The Cold Boot Host 729 connection menu option is selected to temporarily interrupt all AC power to the active Host PC for approximately 15 seconds.

When this menu option is selected, the cold-boot request must be confirmed by entering "Y" in response to the question "ARE YOU SURE? (Y/N)" 730. ... If "Y" is entered, the Remote PC sends instructions to Host

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Unit to temporarily cut AC power to the Host PC for approximately 15 seconds. Once the power is restored, the Host PC reboots, the Host Unit returns a confirmation to the Remote PC that the cold boot process has been completed and processing returns to the Connection Options Main Menu 720.

Col. 12, lines 24-32, discloses "AC power to the Host PC may be temporarily cut by the Host Unit when instructed by a remote user's Remote PC to force a locked-up Host PC to cold-boot, so that normal Host PC processing can be restored remotely. This "cold-boot" procedure is particularly useful when the Host PC will no longer respond to any keyboard or other input. The Host PC is turned off and back on by the remote user, thereby reinitializing the Host PC's processing circuitry."

Claim 243

Claim 243 recites "A remote access device for communicating real time video signals from a host PC to a remote PC and for communicating mouse signals entered in response to the real time video signals from the remote PC to the host PC." See Fig. 1 generally. The remote access device includes a "mouse synchronizer to capture a current mouse position of the mouse pointer on the monitor associated with the remote PC" and a "video appliance" such that the mouse stays synchronized with the real-time video.

Claim 246

Claim 246 recites "A remote access interface between a remote workstation having an associated remote monitor and a host device having an associated host

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

monitor.” See Fig. 1 generally. The remote access interface includes a “mouse capture circuit” and a “mouse adjustment process” such that the mouse stays synchronized with the video signals.

(vi) Grounds of rejection to be reviewed on appeal.

All of the grounds of rejection of the pending claims are presented for appeal. Those grounds include:

1. Whether claims 136-139 and 144 are anticipated under 35 U.S.C. § 102(b) by Sheets (U.S. Patent No. 4,513,373).
2. Whether claim 246 is anticipated under 35 U.S.C. § 102(b) by Moore (U.S. Patent No. 4,816,810).
3. Whether claims 165-168, 186-190, 211, 212, 220, 221 and 243-246 are anticipated under 35 U.S.C. § 102(b) by Rhyne (U.S. Patent No. 4,901,223).
4. Whether claims 157-162, 241 and 242 are anticipated under 35 U.S.C. § 102(b) by Lemon (U.S. Patent No. 4,674,041).
5. Whether claims 194-210 are anticipated under 35 U.S.C. §§ 102(a)/(b) by Edgard (U.S. Patent No. 5,248,964).
6. Whether claims 123-125, 213-219 and 239 are anticipated under 35 U.S.C. § 102(b) by Gurley (U.S. Patent No. 5,036,315).
7. Whether claim 193 is anticipated under 35 U.S.C. § 102(b) by Moore (U.S. Patent No. 5,287,461).

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

8. Whether claims 140, 145-151 and 169-183 are rendered obvious under 35 U.S.C. § 103(a) by the combination of Gurley in view of Sheets.
9. Whether claims 126-128, 152 and 153 are rendered obvious under 35 U.S.C. § 103(a) by the combination of Gurley in view of Lemon.
10. Whether claims 154-156 and 222-226 are rendered obvious under 35 U.S.C. § 103(a) by the combination of Farrand (U.S. Patent No. 5,444,849) in view of Sheets.

(vii) Argument

1. Whether claims 136-139 and 144 are anticipated under 35 U.S.C. § 102(b) by Sheets
 - 1a. Claim 136-137

Claim 136 recites a “system for interfacing digitized keyboard signals with a computer processor generating analog video signals.” The system includes “a remote access facility,” “a non-dedicated serial channel,” and “a computer access interface.” The “computer access interface” receives “the digitized keyboard signals” “from the remote access facility via the non-dedicated serial channel,” and transmits “to the remote access facility via the non-dedicated serial channel a digitized version of the analog video signals” generated by the “computer processor.” Claims 136 states that “the non-dedicated serial channel is between the remote access facility and the computer access interface.”

The Office Action has not clearly identified the portions of Sheets that allegedly disclose the elements of claim 136. Thus, the Office Action has failed to

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

identify substantial evidence supporting the assertion that Sheets renders claim 136 unpatentable for anticipation.

For example, for the claimed “remote access facility” and the “non-dedicated serial channel,” the Office Action points to column 2, lines 3-25 of Sheets. That portion of Sheets describes port selector 12 and stations and terminals 14, 16, 18, and 20. There is no indication in the Office Action as to which station and terminal allegedly is the “remote access facility” and what is the “non-dedicated serial channel.” Presumably, the port selector 12 allegedly corresponds with the “non-dedicated serial channel” and one of the stations/terminals 14, 16, 18, and 20 allegedly corresponds to the “remote access facility.” The Office Action identifies Sheets’ ASCII terminals 22 and 24 as allegedly describing the claimed “computer access interface.” (Office Action, pp. 2-3). Thus, according to the Office Action, all elements of claim 136 are disclosed by Sheets’ port selector 12 or the stations/terminals 14, 16, 18, 20, 22, and 24. At the very least, the cited portions of Sheets do not disclose “a computer access interface … transmitting … a digitized version of the analog video signals.” The office action cites column 2, lines 26-30 for the alleged disclosure of the “computer access interface.” (Office Action, pp. 2-3). But that portion of Sheets simply describes ASCII terminals 22 and 24 and states that they may be VT100 “dumb” terminals. ASCII terminals receive and transmit ASCII symbols. According to Sheets, “[t]he stations 14 and 16, along with the terminals 18, 20, 22 and 24, each utilizes the ASCII communication format for data communication.” (Sheets, col. 2, lines 31-33). They do not generate or transmit analog video signals or a digitized version of analog video signals. The cited portion of Sheets makes

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

no mention of a “computer processor” that generates “analog video signals.” The cited portion of Sheets also does not mention “analog video signals” or “a digitized version of the analog video signals.” The Office Action entirely fails to identify any evidence (much less substantial evidence) that Sheets discloses these elements of claim 136.

Moreover, the preamble expressly recites “a computer processor generating analog video signals.” The office action does not cite to any portion of Sheets for a disclosure of this claim language. (Office Action, pp. 2-3). Thus, the rejection of claim 136 is deficient for this additional reason.

Claim 136 and dependent claim 138 are patentable for at least the reasons identified above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

1b. Claim 138

Claim 138 recites the system of claim 136 “wherein the channel includes a wireline.” The Office Action identifies column 2, lines 56-65, as allegedly disclosing the claimed “channel.” But column 2, lines 56-65, describes converters 30, 32, 34, and 36, modem sharing device 38, modems 40 and 44, and communication link 42. None of these elements satisfy the language of claim 136 that requires the “non-dedicated serial channel” to be “between the remote access facility and the computer access interface.”

For claim 136, the Office Action identified the terminals/stations 14, 16, 18, and 20 as the “remote access facility” and the terminals 22 and 24 as allegedly corresponding to the “computer access interface.” The converters, modem sharing

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

device, modems and communication link now identified for claim 138 is not “between the remote access facility and the computer access interface.” Instead, these structures are between the computer 52 and the port selector 12. Thus, the Office Action has failed to identify substantial evidence that the cited portion of Sheets discloses the “channel” recited in claim 138.

Claim 138 is patentable for at least the reasons identified above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

1c. Claim 139

Claim 139 recites the system of claim 136 “wherein the channel includes a modem-to-modem communication channel.” The Office Action identifies column 2, lines 56-65, as allegedly disclosing the claimed “channel.” But column 2, lines 56-65, describes converters 30, 32, 34, and 36, modem sharing device 38, modems 40 and 44, and communication link 42. None of these elements satisfy the language of claim 136 that requires the “non-dedicated serial channel” to be “between the remote access facility and the computer access interface.”

For claim 136, the Office Action identified the terminals/stations 14, 16, 18, and 20 as the “remote access facility” and the terminals 22 and 24 as allegedly corresponding to the “computer access interface.” The converters, modem sharing device, modems and communication link now identified for claim 138 is not “between the remote access facility and the computer access interface.” Instead, these structures are between the computer 52 and the port selector 12. Thus, the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Office Action has failed to identify substantial evidence that the cited portion of Sheets discloses the “channel” recited in claim 139.

Claim 139 is patentable for at least the reasons identified above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

1d. Claim 144

Claim 144 recites the system of claim 136 “wherein the computer access interface further receives computer keyboard commands from the computer processor and transmits the keyboard commands on the non-dedicated serial channel to the remote access facility.” For claim 144, the Office Action merely states that the subject matter of claim 144 “is the dumb terminal in Sheets” and cites to column 2, lines 26-30, and column 3, line 61-column 4, line 3. The “dumb terminals” identified by Sheets are VT100 terminals and the Office Action does not identify how this meets the claim limitation. (Sheets, col. 2, lines 26-30).

Claim 144 is patentable for at least the reasons identified above with respect to claims 144 and 136 and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

2. Whether claim 246 is anticipated under 35 U.S.C. § 102(b) by Moore (U.S. Patent No. 4,816,810) (hereinafter Moore ‘810)

Claim 246 recites a “remote access interface” between a “remote workstation” having a monitor, and a “host device” having an associated monitor. The “remote access interface” includes “a host mouse,” a “video capture circuit,” a

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

“mouse capture circuit,” and a “mouse adjustment process.” The “video capture circuit,” the “mouse capture circuit,” and the “mouse adjustment process” each have additional limitations required by the claim. For example, the “video capture circuit” is disposed “to intercept analog video signals from the host device and to apply the analog video signals to the host monitor such that the host monitor displays a host pointer associated with the host mouse.” The “mouse capture circuit” is disposed “to capture remote mouse signals from the remote workstation over a telecommunication path and to transmit the remote mouse signals to the host device for further processing as though the remote mouse signals were received from the host mouse.” Finally, the “mouse adjustment process” is disposed “to cause the host pointer on the host monitor to jump to a position determined by the remote mouse signals.”

The Office Action has identified no portions of Moore ‘810 that disclose the claimed “video capture circuit,” the “mouse capture circuit,” or the “mouse adjustment process.” Moore ‘810 describes a typical computer mouse coupled to a local computer with the addition of a second “acceptance” button for the mouse added so that the mouse does not move when the user intends to press the mouse button. (Moore ‘810, col. 1, line 44-col. 2, line 2). Moore ‘810 simply splices remote acceptance switch 54 into two of the mouse wires to allow separate actuation of the mouse button. (Moore ‘810, Figure 3). Nothing else is identified. Thus, the Office Action has failed to identify substantial evidence that Moore ‘810 anticipates claim 246 and should be indicated as allowable for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

3. Whether claims 165-168, 186-190, 211, 212, 220, 221 and 243-246 are anticipated under 35 U.S.C. § 102(b) by Rhyne (U.S. Patent No. 4,901,223)

3a. Claims 166-167

Claim 165 recites, among other things, a user station, comprising:

- an analog video source generating analog video signals;
- an analog video port exhibiting the analog video signals;
- a video display connected to the video port to retrieve from the port the analog video signals and to display the retrieved analog video signals;
- a video processor to receive, digitize and packetize the analog video signals into packeted digital video signals.

With respect to claim 165, the Office Action identifies Rhyne's workstation 16 as allegedly corresponding to the claimed "user station," and Rhyne's host computer 10 as allegedly corresponding to the claimed "remote station." (Office Action, p. 4). There are several aspects of claim 165 that are not disclosed by the cited portions of Rhyne.

The claimed "user station" includes "a video processor to receive, digitize and packetize the analog video signals into packeted digital video signals." The Office Action cites column 8, lines 5-16, of Rhyne for this claim feature. But that portion of Rhyne describes the application protocol running on the workstation 16, and that it sends parameters to the application program in the host computer 10 or commands to the display service 50 (or both) upon entry of keyboard or mouse

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

input. There is no mention of a processor in workstation 16 that receives, digitizes and packetizes analog video signals from the analog video source. This entire element of claim 165 is entirely missing from the cited portions of Rhyne.

Claim 165 also recites a “network connector … to deliver the packeted digital video signals onto the established logical digital data path.” The Office Action identifies a portion of Rhyne merely describing the communication service 24 that establishes paths between the host computer 10 and a workstation. The cited portion of Rhyne does not disclose a “network connector” that “deliver[s] the packeted digital video signals onto the established logical digital data path.” In the cited portions of Rhyne, there is no packeted digital video signals to be passed from the workstation (i.e., the alleged “user station”) to the host computer (i.e., the alleged “remote station”).

The cited portion of Rhyne does not disclose “a keyboard port for keyboard signals, the network connector also delivering keyboard signals from the remote station to the keyboard port via the established logical digital data path.” The Office Action identifies Rhyne’s patent at column 8, lines 61-63. But the cited portion of Rhyne relates to the input of commands entered at the workstation (i.e., the alleged “user station”). (Rhyne, col. 8:61-63). There is no disclosure of a “network connector also delivering keyboard signals from the remote station to the keyboard port” of the user station. Indeed, keyboard signals are not sent from the host computer (i.e., the alleged “remote station”) to the workstation 16 (i.e., the alleged “user station”).

Similarly, the cited portion of Rhyne does not disclose “a mouse port for mouse signals, the network connector also delivering mouse signals from the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

remote station to the mouse port via the established logical digital data path.” Col. 9, lines 27-42, cited in the Office Action merely describe the operation of the application protocol that runs on workstation 16. It does not describe the delivery of any signals, much less mouse signals, from the host computer (i.e., the alleged “remote station”) to the workstation 16 (i.e., the alleged “user station”).

Finally, col. 10:31-67 of Rhyne does not disclose “a processor to retrieve the keyboard and mouse signals from the remote station and to instruct the analog video source to generate new analog video signals based on the retrieved keyboard and mouse signals.” According to the Office Action, the claimed “remote station” allegedly corresponds to Rhyne’s host computer. Rhyne does not disclose the entry of keyboard or mouse signals at the “remote station.” Thus, there cannot be a “processor to retrieve the keyboard and mouse signals from the remote station” and “instruct the analog video source [alleged to be in Rhyne’s workstation 16] to generate new video signals based on the retrieved keyboard and mouse signals.” The video signals displayed at workstation 16 are not based on keyboard or mouse signals from the host computer (i.e., the alleged “remote station”).

Dependent claims 166-167 are patentable for at least each of the reasons described above for claim 165. Thus, the anticipation rejections of claims 165-167 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3b. Claim 168

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

With respect to independent claim 165, the Office Action identified Rhyne's workstation 16 as allegedly corresponding to the claimed "user station," and Rhyne's host computer 10 as allegedly corresponding to the claimed "remote station." (Office Action, p. 4). Claim 168 requires the "remote computer" to have "a video processor to receive, de-digitize and de-packetize the packeted digital video signals back into the analog video signals." Further, the "digital video signals" received by the "video processor" are the signals that the "video processor" of claim 165 digitized and packetized. Rhyne's host computer 10, however, has no such "video processor." Rhyne's host computer 10 never receives video signals, much less digital video signals, from the workstation. Thus, the Rhyne citation fails to disclose at least this element of claim 168. The anticipation rejection of claim 168 should be withdrawn for these additional reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3c. Claim 186

Claim 186 recites "A system for interfacing keyboard signals with a selected computer processor generating video signals, comprising: an on-screen display generator to create a menu for a monitor associated with the keyboard signals, said menu listing the selected computer processor among a plurality of other computer processors for selection by a user of the monitor." The cited portions of Rhyne do not disclose a system for interfacing keyboard signals with a selected computer processor including "an on-screen display generator to create a menu for a monitor associated with the keyboard signals, said menu listing the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

selected computer processor among a plurality of other computer processors for selection by a user of the monitor.” Col. 4:58-61 merely states that the operating system of the workstation can be a UNIX-based system or the Virtual Resource Manager from IBM. Presumably, the Office Action is equating the workstation with the “selected computer processor” recited in claim 186. There is no disclosure in the Rhyne citation of an “on-screen display generator that “create[s] a menu for a monitor associated with the keyboard signals.” Nor is there any disclosure of an “on-screen display processor” in which “said menu list[s] the selected computer processor among a plurality of other computer processors for selection by a user of the monitor.” These claim elements are entirely missing from the cited portions of Rhyne.

The cited portion of Rhyne also fails to disclose “a video interface to receive information indicative of the video signals from the network via the network access device.” The “video signals” are the video signals generated by the “selected computer processor” that is one of a “plurality of computer processors.” Col. 10:1-11 cited in the Office Action explains that there are “messages” that are exchanged between the workstation and the host computer, and that the workstation responds to received messages by updating the spreadsheet display. But there is no disclosure of “information indicative of the video signals” from the “selected computer processor” that is received by a “video interface” from “the network via the network access device.”

The cited portion of Rhyne also fails to disclose “a keyboard interface to read the keyboard signals and to deliver the keyboard signals to the selected computer processor via the network and the network access device.” Column

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

10:31-67 of Rhyne describes aspects of the application protocol running on workstation 16. The Rhyne citation makes no mention of the “deliver[y of] the keyboard signals to the selected computer processor via the network and the network access device.” The Rhyne citation does not describe the sending of keyboard signals across a network, much less the remainder of the elements recited in this portion of claim 186.

The anticipation rejection of claim 186 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3d. Claim 187

Claim 187 recites “a mouse interface to read the mouse signals and to deliver the mouse signals to the selected computer processor via from the network and the network access device.” The cited portion of Rhyne does not disclose “a mouse interface … to deliver the mouse signals to the selected computer processor via from the network and the network access device.” Column 9:27-42 of Rhyne describes aspects of the application protocol’s response to the entry of keyboard or mouse signals. But the application protocol runs on workstation 16. There is no disclosure of the delivery of “mouse signals to the selected computer processor via from the network and the network access device.”

Thus, claim 187 is additionally patentable over the cited reference for at least this reason and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

3e. Claim 188

Claim 188 recites “the keyboard interface communicates with the selected computer processor through a keyboard port of the selected computer processor.” The cited portion of Rhyne does not disclose that “the keyboard interface communicates with the selected computer processor through a keyboard port of the selected computer processor.” Column 9:27-42 of Rhyne describes aspects of the application protocol’s response to the entry of keyboard or mouse signals. But the application protocol runs on workstation 16. As explained in claim 186, the “keyboard signals” are those that are delivered to the selected computer processor via the network and the network access device. Claim 188 states that the “keyboard interface,” that reads and delivers the keyboard signals via the network and the network access device, “communicates with the selected computer processor through a keyboard port of the selected computer processor.” In the Rhyne citation, there is no disclosure of such a “keyboard interface” or of “a keyboard port of the selected computer processor” that communicates with the keyboard interface.

Thus, claim 188 is additionally patentable over the cited reference for at least this reason and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3f. Claim 189

Claim 189 recites “the mouse interface communicates with the selected computer processor through a mouse port of the selected computer processor.” In addition to each of the patentability reasons expressed above for claim 187,

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

dependent claim 189 is patentable for at least an additional reason. The cited portion of Rhyne does not disclose that “the mouse interface communicates with the selected computer processor through a mouse port of the selected computer processor.” Column 9:27-42 of Rhyne describes aspects of the application protocol’s response to the entry of keyboard or mouse signals. But the application protocol runs on workstation 16. As explained in claim 187, the “mouse signals” are those that are delivered to the selected computer processor via the network and the network access device. Claim 189 states that the “mouse interface,” that reads and delivers the mouse signals via the network and the network access device, “communicates with the selected computer processor through a mouse port of the selected computer processor.” In the Rhyne citation, there is no disclosure of such a “mouse interface” or of “a mouse port of the selected computer processor” that communicates with the mouse interface.

Thus, claim 189 is additionally patentable over the cited reference for at least this reason and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3g. Claim 212

Unamended Claim 212 recites “a video process to capture the video input signals,⁵ digitize them and format them for transmission to the remote computer, even when the host computer has locked up to no longer accept any user input signals.

⁵ Which, given the earlier elements of the claim, would be understood to be the previously recited “video signals.”

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The cited portion of Rhyne does not disclose a remote access system including such “a video process.” The Rhyne citation does not disclose the capture, digitizing, and formatting of video signals for transmission to a remote computer. The Office Action cites col. 10:18-54. But this portion of Rhyne merely describes the operation of the application protocol running on workstation 16. Presumably this means that the Examiner contends that Rhyne’s host computer corresponds to the claimed “remote computer.” Rhyne does not send captured, digitized and formatted video signals from the workstation to the host computer.

Moreover, since Rhyne does not disclose the capture, digitization, and formatting of video signals for transmission, it cannot disclose the capture, digitization, and formatting of video signals for transmission “even when the host computer has locked up to no longer accept any user input signals.” The Office Action is devoid of any analysis of how this portion of the limitation is met by Rhyne.

The cited portion of Rhyne does not disclose “to communicate the video signals, in digital format, on the transmission medium between the host and remote computers, even when the host computer has locked up to no longer accept any user input signals.” The Office Action cites Rhyne’s column 10:1-11. Again, that citation describes aspects of Rhyne’s application protocol running on workstation 16. The Rhyne citation does not disclose the communication of any video signals, in a digital format or otherwise, on the transmission medium between the alleged host and remote computers. The Rhyne citation certainly does not disclose, or even suggest, that the system communicates such signals

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

“even when the host computer has locked up to no longer accept any user input signals.”

The anticipation rejection of claim 212 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3h. Claim 220

Unamended claim 220 begins by reciting a “computer” including “a remote access engine.” The Office Action cites Rhyne at column 4, line 64-column 5, line 3, as allegedly disclosing a computer with a remote access engine. But the Rhyne citation never states that the communication service 24 is a computer with a remote access engine. Rhyne merely states that it can be a “conventional facility for interconnecting a plurality of remote users to a central processor such as a host 10.” This “facility” can be something as simple as an Ethernet switch. Thus, Rhyne fails to provide any detail of this facility; it is not inherent that the facility be a computer with a remote access engine.

With respect to the claimed “set of circuit modules” that is recited as part of the “computer,” the Office Action inconsistently asserts that Rhyne’s workstation 16 satisfies that portion of the claim. (Office Action, p. 6 (citing Rhyne col. 8:5-36)). For the “remote access engine” claim element, the Office Action alleged that the communication service 24 satisfied that element of the claimed “computer,” but then alleges that an entirely different component of the Rhyne system (i.e., the workstation 16) satisfies the “set of circuit modules” portion of the claimed “computer.” Thus, the Office Action has failed to identify a single alleged

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

“computer” that satisfies all elements of claim 220, notwithstanding the fact that the rejection of claim 220 is an anticipation rejection.

Apart from the fact that the Office Action has identified two separate components of the Rhyne system, the Rhyne citation does not disclose “a set of circuit modules in communication with a set of corresponding host computers to receive analog video signals from the corresponding host computers, to digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus.” First, the Rhyne citation simply describes the application protocol in the workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. Rhyne does not disclose more than a single host computer, and thus, there cannot be “a set of circuit modules in communication with a set of corresponding host computers” as recited in claim 220.

In addition, nothing in the workstation 16 “receive[s] analog video signals from the corresponding host computers.” No video signals are sent from Rhyne’s host computer to the workstation. Moreover, nothing in workstation 16 is adapted “to digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus.” These aspects of claim 220 are completely missing from the Rhyne citation.

Finally, the cited portion of Rhyne fails to disclose the claimed “computer” having “a communication port establishing a network connection via the network

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

medium between⁶ the remote access engine and a selected one of said set of circuit modules to receive the digitized and synchronized video signals and to deliver the selected digitized video signals to the remote computer for display.” The Office Action again cites to column 8:5-36 as allegedly disclosing this element of claim 220. But the Rhyne citation describes the application protocol in the workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. The Rhyne citation does not disclose a “communication port … to receive the digitized and synchronized video signals and to deliver the selected digitized video signals to the remote computer for display.” Rhyne does not deliver video signals (digital or analog) from the workstation to the host computer. Rhyne’s host computer (i.e., the alleged “remote computer”) does not include a monitor that is capable of displaying video signals. This element is not disclosed in the Rhyne citation.

The anticipation rejection of claim 220 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3i. Claim 221

Unamended dependent claim 221 depends from claim 220 and recites specific elements of each of the “circuit modules” included as part of the “computer” recited in claim 220. The Office Action alleges that the claimed “main CPU,”⁷ “field programmable gate array,” and “bus controller” of each

⁶ Or “for the remote access engine” if the unentered amendment were entered.

⁷ Which, given the other elements of the claim, would be understood to coordinate “analog to digital conversion” as claimed in the unentered amendment.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

“circuit module” are disclosed at Rhyne, column 8:5-36. (Office Action, p. 7). But that Rhyne citation describes the application protocol in the workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. There are no specific circuit components described in this portion of Rhyne whatsoever. Thus, Rhyne does not disclose these elements of claim 221.

The Office Action alleges that Rhyne’s column 10:31-54 discloses the “video interface circuit” and “video RAM” recited in claim 221. This paragraph of Rhyne describes some aspects of the application protocol that runs on workstation 16. But again, this portion of Rhyne does not describe any specific circuit components at all. Thus, Rhyne does not disclose these elements of claim 221 either.

Finally, the Office Action cites to Rhyne’s Figure 3, items 46 and 48 as allegedly disclosing “at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer.” The citation to Rhyne, however, identifies the keyboard driver 46 and mouse driver 48 of the workstation that interface directly with the keyboard and mouse. Those drivers are not disclosed as receiving keyboard and mouse information “from the remote computer” as recited in claim 221.

The anticipation rejection of claim 221 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

3j. Claim 211

For claim 211, the Office Action states that “Claim 211 is substantially the same as claims 220-221.” Accordingly, the analysis of the recited elements will be made with respect to the allegations presented in the rejection of claim 220.

Claim 211 recites a “circuit module” including several elements. The Office Action alleges that the claimed “main CPU,”⁸ “field programmable gate array,” and “bus controller” of each “circuit module” are disclosed at Rhyne, column 8:5-36. (Office Action, p. 7). But that Rhyne citation describes the application protocol in the workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. There are no specific circuit components described in this portion of Rhyne whatsoever. Thus, Rhyne does not disclose these elements of claim 211.

The Office Action alleges that Rhyne’s column 10:31-54 discloses the “video interface circuit” and “video RAM” recited in claim 211. This paragraph of Rhyne describes some aspects of the application protocol that runs on workstation 16. But again, this portion of Rhyne does not describe any specific circuit components at all. Thus, Rhyne does not disclose these elements of claim 211 either.

Finally, the Office Action cites to Rhyne’s Figure 3, items 46 and 48 as allegedly disclosing “at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and

⁸ Which, given the other elements of the claim, would be understood to coordinate “analog to digital conversion” as claimed in the unentered amendment.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

keyboard information from the remote computer.” The citation to Rhyne, however, identifies the keyboard driver 46 and mouse driver 48 of the workstation that interface directly with the keyboard and mouse. Those drivers are not disclosed as receiving keyboard and mouse information “from the remote computer” as recited in claim 211.

The anticipation rejection of claim 211 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3k. Claim 243

The Office Action alleges that Rhyne column 10, line 55 through column 11, line 5, discloses each element of claim 243. (Office Action, p. 8). But this portion of Rhyne describes aspects of how the application protocol running on workstation 16 processes mouse inputs to update the spreadsheet being displayed on the workstation monitor. The Rhyne citation does not disclose “a video process to capture and digitize video signals from the host PC including video signals indicating a position of a mouse pointer on a monitor associated with the host PC, the position of said mouse pointer identified by the video process being delayed by a period associated with the capturing and digitizing steps.” The Rhyne citation does not disclose “a mouse synchronizer to capture a current mouse position of the mouse pointer on the monitor associated with the remote PC.” Nor does the Rhyne citation disclose “a video application to communicate the current mouse position of the mouse pointer on the monitor associated with the remote PC to the host PC whereupon the host PC jumps the host mouse pointer to a position

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

coincident with the current mouse position.” There is no discussion of capturing and digitizing video signals, or the synchronization of mouse positions between two computers. In fact, it is not entirely clear what portion of the Rhyne system the Office Action alleges corresponds to the “remote PC” and what portion allegedly corresponds to the “host PC.” In any event, the elements of claim 243 are entirely missing from the Rhyne citation.

The anticipation rejection of claim 243 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

31. Claim 244

Claim 244 depends from claim 243 and recites “the current mouse position is communicated from the remote computer to the mouse synchronizer in the form of current X/Y coordinates of the remote computer mouse pointer.”

The Office Action alleges that Rhyne column 10, line 55 through column 11, line 5, and column 19, lines 46-66 discloses the subject matter of claim 244. (Office Action, p. 8). The first citation to Rhyne describes aspects of how the application protocol running on workstation 16 processes mouse inputs to update the spreadsheet being displayed on the workstation monitor. The second citation also describes aspects of the application protocol running on workstation 16 relating to how the mouse cursor movements at workstation 16 are echoed to the monitor of workstation 16, and how the spreadsheet is updated or altered in response to the mouse movements. But claim 244 requires the “current mouse position” be communicated “from the remote computer” (i.e., alleged to be

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Rhyne's host computer) to "the mouse synchronizer" in the "remote access device." The Rhyne citation entirely fails to disclose the subject matter of claim 244.

The anticipation rejection of claim 244 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3m. Claim 245

Claim 245 recites "the mouse synchronizer captures the current mouse position of the mouse pointer on the monitor associated with the remote PC whenever a remote user clicks a mouse button."

The Office Action cites Rhyne column 5, line 65 through column 6, line 3, as allegedly disclosing the subject matter of claim 245. (Office Action, p. 8). According to claims 245 and 243, the "mouse synchronizer" is part of a "remote access device for communicating real time video signals from a host PC to a remote PC and for communicating mouse signals entered in response to the real time video signals from the remote PC to the host PC." Presumably, Rhyne's host computer allegedly corresponds to the claimed "remote PC" and the workstation allegedly corresponds to the claimed "host PC." According to the claim, the mouse synchronizer captures the current mouse position of the mouse pointer on the monitor associated with the remote PC (i.e., Rhyne's host computer) whenever a remote user clicks on a mouse button. But there is no mouse that is disclosed to be associated with Rhyne's host computer. The only mouse shown is associated with the workstation 16, which seems to correspond with what the Examiner

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

asserts to be the “host PC.”⁹ Thus, there is no mouse position associated with the “remote PC” under the Examiner’s view of Rhyne. Moreover, even if the workstation is now viewed as the “remote PC,” the position of the mouse at the workstation is not sent to any device that is alleged to be a “remote access device.” In fact, the mouse position is not even sent to the host computer in Rhyne. Instead, Rhyne’s workstation interprets the keyboard and mouse inputs, processes those inputs in the application protocol running on the workstation, and, if appropriate, sends parameters or commands to the host computer. (Col. 8:5-36). The Rhyne citation does not disclose the subject matter of claim 245.

The anticipation rejection of claim 245 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

3n. Claim 246

The Office Action alleges that Rhyne, column 5, line 16, and column 10, line 55 through column 11, line 5, discloses each element of claim 246. These portions of Rhyne describe various aspects of workstation 16. Column 5, line 16, simply states that the workstation includes a mouse. Column 10, line 55 through column 11, line 5, states that the application protocol running on the workstation will receive mouse inputs, update the mouse location on the workstation monitor, and update or modify the spreadsheet being manipulated at the workstation. These portions of Rhyne do not disclose (1) “[a] remote access interface between a

⁹ This confusion stems from the fact that the Office Action did not clearly identify what part of Rhyne’s system allegedly corresponds to the “host PC” and what allegedly corresponds to the “remote PC” in independent claim 243.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

remote workstation having an associated remote monitor and a host device having an associated host monitor;” (2) “a video capture circuit to intercept analog video signals from the host device and applying the analog video signals to the host monitor such that the host monitor displays a host pointer associated with the host mouse;” (3) “a mouse capture circuit to capture remote mouse signals from the remote workstation over a telecommunication path and to transmit the remote mouse signals to the host device for further processing as though the remote mouse signals were received from the host mouse;” or (4) “a mouse adjustment process to cause the host pointer on the host monitor to jump to a position determined by the remote mouse signals.” Rhyne does not disclose a “video capture circuit,” a “mouse capture circuit to capture remote mouse signals from the remote workstation” (i.e., Rhyne’s host computer), or “a mouse adjustment process.” All of these elements are completely missing from the cited portions of Rhyne.

The anticipation rejection of claim 246 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

4. Whether claims 157-162, 241 and 242 are anticipated under 35 U.S.C. § 102(b) by Lemon (U.S. Patent No. 4,674,041).

- 4a. Claim 157

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 157 recites a system for monitoring a "host computer" from a "remote processor." The "host computer" includes a "host processor" and a "host display device port." The "remote processor" includes a "remote display device." A "host unit" is connected between the "remote processor" and the "host computer." In addition, the "host unit" "(1) causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit and (2) upon receipt of a reset command, causes the host unit to initiate a reset operation of the host computer."

Lemon describes a system for distributing coupons or other certificates for retail sales of merchandise. (Lemon, col. 1:7-12). Each retail store has a terminal that communicates with a host central processing unit located remote from the stores. (Lemon, col. 2:5-8). The terminals may be monitored and controlled via the host computer to obtain data such as the number of coupons issued, etc. (Lemon, col. 2:13-17).

The Office Action alleges that Lemon's column 26, lines 28-37, and column 27, lines 55-56, disclose "a host unit connected between the remote processor and the host computer which (1) causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit and (2) upon receipt of a reset command, causes the host unit to initiate a reset operation of the host computer." The column 26 citation to Lemon states that the terminal T periodically initiates a call to the host H when the full capacity in non-volatile memory 56 allocated for coupon history data is exhausted. (Lemon, col. 26:28-

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

32). The data that is sent to host H is coupon history information and coupon count data. (Lemon, col. 26:38-55). The cited portions of Lemon do not disclose a host unit that “causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit.” The Lemon citation never describes an arrangement in which screen data output on the host display device port appears on the remote display device. In the Lemon citation, no screen data from the terminal T, for example, is displayed on a display device associated with host H. This aspect of claim 157 is entirely missing from the Lemon citations.

More fundamentally, however, claim 157 describes a system having at least three components – a remote processor, a host computer, and “a host unit connected between the remote processor and the host computer.” The cited portions of Lemon relate to a system having only a group of terminals and a host computer. Those devices are connected by a modem, but the Office Action does not allege that the modem corresponds to the remote processor, the host computer or the host unit. Instead, by alleging that the terminal T discloses the “host unit ...” claim elements, the Office Action is implicitly alleging that the “host unit” corresponds to terminal T. (Lemon, col. 26:28-37). Thus, one of the components expressly recited in claim 157 is missing from the Lemon reference. Either the host unit or the remote processor is not disclosed in Lemon as Lemon has been construed in the Office Action.

The anticipation rejection of claim 157 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

4b. Claim 158

Claim 158 depends from claim 157 and recites that “the host unit also automatically causes a reset operation whenever a connection between the remote processor and the host unit is terminated.”

The Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 158. But Lemon’s column 10, lines 28-60, describes aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons. This portion of Lemon does not relate to a host unit “automatically caus[ing] a reset operation whenever a connection between the remote processor and the host unit is terminated.” The Lemon citation has nothing to do with causing a reset operation. Thus, the anticipation rejection of claim 158 should be withdrawn for at least the above reason and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

4c. Claim 159

Claim 159 depends from claim 157 and recites that “the host unit receives communications from the remote processor via a telephone carrier signal and the host unit includes a carrier detect circuit and automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.”

The Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 159. But Lemon’s column 10, lines 28-60, describes

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons. This portion of Lemon does not relate to a host unit “unit receiv[ing] communications from the remote processor via a telephone carrier signal and the host unit include[ing] a carrier detect circuit and automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.” Thus, the anticipation rejection of claim 159 should be withdrawn for at least the above reason and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

4d. Claim 160

For claim 160, the Office Action states that “Claim 160 is substantially the same as claim 157.” (Office Action, p. 9). However, claim 160 is a method claim and claim 157 is a system claim, and the rejection should fail on this ground alone.

In addition, claim 160 recites a method of monitoring a “computer system” including providing a “host unit” between a “host computer” and a “remote processor.” The “host computer” includes a “host processor” and a “host display device port.” The “remote processor” includes a “remote display device.” In addition, the method includes “using the host unit to cause screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit; and receiving a reset command at the host unit and thereupon causing the host unit to initiate a reset operation of the host computer.”

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Lemon describes a system for distributing coupons or other certificates for retail sales of merchandise. (Lemon, col. 1:7-12). Each retail store has a terminal that communicates with a host central processing unit located remote from the stores. (Lemon, col. 2:5-8). The terminals may be monitored and controlled via the host computer to obtain data such as the number of coupons issued, etc. (Lemon, col. 2:13-17).

The Office Action implicitly alleges that Lemon's column 26, lines 28-37, and column 27, lines 55-56, disclose "using the host unit to cause screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit; and receiving a reset command at the host unit and thereupon causing the host unit to initiate a reset operation of the host computer." The column 26 citation to Lemon states that the terminal T periodically initiates a call to the host H when the full capacity in non-volatile memory 56 allocated for coupon history data is exhausted. (Lemon, col. 26:28-32). The data that is sent to host H is coupon history information and coupon count data. (Lemon, col. 26:38-55). The cited portions of Lemon do not disclose using a host unit "to cause screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit." The Lemon citation never describes an arrangement in which screen data output on the host display device port appears on the remote display device. In the Lemon citation, no screen data from the terminal T, for example, is displayed on a display device associated with host H. This aspect of claim 160 is entirely missing from the Lemon citations.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

More fundamentally, however, claim 160 describes a method of monitoring a system having at least three components – a remote processor, a host computer, and “a host unit connected between the remote processor and the host computer.” The cited portions of Lemon relate to a system having only a group of terminals and a host computer. Those devices are connected by a modem, but the Office Action does not allege that the modem corresponds to the remote processor, the host computer or the host unit. Instead, by alleging that the terminal T discloses the “host unit ...” claim elements, the Office Action is implicitly alleging that the “host unit” corresponds to terminal T. (Lemon, col. 26:28-37). Thus, one of the components expressly recited in claim 160 is missing from the Lemon reference. Either the host unit or the remote processor is not disclosed in Lemon as Lemon has been construed in the Office Action.

The anticipation rejection of claim 160 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

4e. Claim 161

For claim 161, the Office Action states that “Claim 161 is substantially the same as claim 158.” However, claim 161 is a method claim and claim 158 is a system claim, and the rejection should fail on this ground alone.

Implicitly, the Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 161. But Lemon’s column 10, lines 28-60, describes aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

This portion of Lemon does not relate to a host unit “automatically caus[ing] a reset operation whenever a connection between the remote processor and the host unit is terminated.” The Lemon citation has nothing to do with causing a reset operation. Thus, the anticipation rejection of claim 161 should be withdrawn for at least the above reason and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

4f. Claim 162

For claim 162, the Office Action states that “Claim 162 is substantially the same as claim 159.” However, claim 161 is a method claim and claim 159 is a system claim, and the rejection should fail on this ground alone.

The Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 162. But Lemon’s column 10, lines 28-60, describes aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons. This portion of Lemon does not relate to “receiving communications from the remote processor at the host unit via a telephone carrier signal and wherein the host unit includes a carrier detect circuit and automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.” The Lemon citation has nothing to do with communications with a remote processor. Thus, the anticipation rejection of claim 162 should be withdrawn for at least the above reason and for the corresponding

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

4g. Claims 241 and 242

Claim 241 recites at least three devices – a host computer, a remote computer distantly located relative to the host computer, and a remote access PC. The remote access PC facilitates communications between the host computer and the remote computer. The remote access PC includes a remote access process, a control module, and a communication circuit.

The Office Action alleges that Lemon's column 26, lines 28-37, discloses the "remote access process ..." portion of the claimed remote access PC. Thus, according to the Office Action, the terminal T described in column 26, lines 28-37, corresponds to the "remote access PC." But Lemon's terminal T does not "facilitate communications between a host computer and a remote computer distantly located relative to each other." Assuming that Lemon's host computer corresponds to the claimed host computer, Lemon does not disclose another device that could correspond to the claimed "remote computer." Thus, the Lemon citations do not disclose "a remote access process to establish a logical data path between the host computer and the remote computer." Likewise, the Lemon citations do not disclose "a communication circuit establishing a different logical data path between the remote computer and the communication circuit, the communication circuit delivering the reboot signal to the control module when commanded to do so by the remote computer via the different logical data path."

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The Office Action alleges that Lemon's column 8, lines 54-55, and column 27, lines 55-56, disclose "a control module having an AC power input to receive AC power from an external power source, an AC power output to deliver the AC power from the external power source to the host computer, a switch therebetween, and a control data input to receive a reboot signal and thereupon interrupt AC power to the host computer by operation of the switch." The column 8 citation simply states that Lemon's terminal T has a power supply and that the power supply may include a keyed switch 64 to prevent people who do not have the key from energizing or de-energizing the terminal. The column 27 citation refers to "host to terminal" commands to reboot the terminal to update coupon data. Neither citation discloses a "control module" having "a control data input to receive a reboot signal and thereupon interrupt AC power to the host computer by operation of the switch." Indeed, the Office Action not attempted to identify a specific circuit or device that allegedly corresponds to the "control module."

The "remote access PC" of claim 241 also includes "a communication circuit establishing a different logical data path between the remote computer and the communication circuit, the communication circuit delivering the reboot signal to the control module when commanded to do so by the remote computer via the different logical data path." Thus, "the reboot signal" is delivered by the "communication circuit" to "the control module when commanded to do so by the remote computer via the different logical data path." The Office Action alleges that Lemon's column 26, lines 28-37, and column 27, lines 55-56, disclose this element. The column 26 citation to Lemon states that the terminal T periodically initiates a call to the host H when the full capacity in non-volatile memory 56

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

allocated for coupon history data is exhausted. (Lemon, col. 26:28-32). The data that is sent to host H is coupon history information and coupon count data. (Lemon, col. 26:38-55). The column 27 citation refers to “host to terminal” commands to reboot the terminal to update coupon data. But because the Office Action equates the terminal T with the “remote access PC,” the Lemon citations do not disclose a “remote computer” that is in communication with the “communication circuit” of the “remote access PC.” In addition, the Office Action not attempted to identify a specific circuit that corresponds to the “communication circuit” or a circuit or device that allegedly corresponds to the “control module.”

Dependent claim 242 is not anticipated by Lemon for at least the reasons provided above for claim 241. Thus, the anticipation rejections of claims 241 and 242 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5. Whether claims 194-210 are anticipated under 35 U.S.C. §§ 102(a)/(b) by Edgard (U.S. Patent No. 5,248,964)

5a. Claim 194

Claim 194 recites a “data processing device” and a “microprocessor controlled computer hardware device.” The “microprocessor controlled computer hardware device” works even if the “data processing device” is locked up and no longer processing data or input commands. The “microprocessor controlled computer hardware device” also includes a “video raster signal input circuit” for

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

receiving the video raster signal representative of the information displayed on the video display terminal from the data processing device. The “microprocessor controlled computer hardware device” also includes “a converter communicating with the video raster signal input circuit to convert the video raster signal into a digital signal representative of the information contained in the video raster signal.”

The Office Action alleges that Edgard’s column 2, lines 43-64, discloses the subject matter of claim 194. But Edgard discloses a single computer with a more efficient operation for writing character to and reading characters from the video buffer when in graphics mode. (Edgard, col. 2, lines 26-30; Fig. 1). The cited section from Edgard describes aspects of how the computer writes information to, and reads information from the computer’s video memory. The Edgard citation does not disclose two devices that could correspond to the “data processing device” and a “microprocessor controlled computer hardware device” of claim 194. The Edgard citation does not disclose “a microprocessor controlled computer hardware device working even if the data processing device is locked up and no longer processing data or input commands.” The Edgard citation also does not disclose a “microprocessor controlled computer hardware device include[ing] a video raster signal input circuit for receiving a video raster signal representative of the information displayed on the video display terminal from the data processing device.” Nor does the Edgard citation disclose “a converter communicating with the video raster signal input circuit to convert the video raster signal into a digital signal representative of the information contained in the video raster signal.” The Edgard citation does not relate to reception and conversion of a

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

video raster signal from a data processing device into a digital signal representative of the video raster signal. The Office Action fails to specifically identify what circuit in Edgard's system allegedly corresponds to the "microprocessor controlled computer hardware device." In fact, the cited portion of Edgard has very little, if any, relevance to the subject matter recited in claim 194.

The anticipation rejection of claim 194 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5b. Claim 195

The Office Action alleges that the subject matter of claim 195 is disclosed by Edgard's column 10, lines 19-54. Edgard's column 10, lines 19-54, describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. Claim 195 further defines the "converter" that is part of the "microprocessor controlled computer hardware device" recited in claim 194. As explained above, the Office Action has not identified the "microprocessor controlled computer hardware device" or the "converter" recited in claim 194. The citation to column 10, lines 19-54, of Edgard do not remedy this omission. There is no part of the Edgard citation that discloses "a microprocessor controlled computer hardware device working even if the data processing device is locked up and no longer processing data or input commands, wherein the microprocessor controlled computer hardware device includes a video raster signal input circuit for receiving a video raster signal representative of the information displayed on the video display

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

terminal from the data processing device and a converter communicating with the video raster signal input circuit to convert the video raster signal into a digital signal representative of the information contained in the video raster signal.” Yet, this is required by claim 195 due to its dependency on claim 194. By reciting “said converter,” claim 195 is incorporating the claim 194 requirement that the “converter” be a part of the “microprocessor controlled computer hardware device.”

The anticipation rejection of claim 195 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5c. Claim 196

Claim 196 depends from claim 195 and recites “a transmitter coupled to said converter for transmitting said digital code to a remote location.”

The Office Action alleges that Edgard’s column 4, lines 51-67, discloses the elements of claim 196. The Edgard citation, however, describes aspects of the signal flow within or relating to ASIC 50. But the Edgard citation does not describe “a transmitter coupled to said converter for transmitting said digital code to a remote location.” The Edgard citation does not describe transmission of any data or code to a remote location. In fact, the Office Action does not specifically identify the alleged “transmitter” that is alleged to be coupled to the “converter.”

Moreover, with respect to claim 195, the Office Action implicitly alleged that processor 10 corresponded to the “character determiner” that is included as part of the “converter” of claim 195. Yet, for claim 194, the Office Action

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

implicitly alleged that the “microprocessor controlled computer hardware device,” which includes the “converter,” corresponded to DPRB 54 since the DPRB was the primary focus of the discussion in the Edgard passage cited with respect to claim 194. Thus, the Office Action has not clearly identified which portions of Edgard’s system allegedly correspond to the elements recited in claims 194-196.

The anticipation rejection of claim 196 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5d. Claim 197

The Office Action alleges that Edgard’s column 4, lines 17-23, discloses the elements of claim 197. But column 4, lines 17-23, merely states that the video system 36 of Edgard’s computer handles the storage and display control functions for information to be displayed on CRT 38. This portion of Edgard simply discloses the particular type of video system used in the Edgard computer. The cited portion of Edgard does not disclose the elements of claim 196 – namely, “a receiver at said remote location coupled to said transmitter for receiving said digital codes transmitted by said transmitter; and a remote video display coupled to said receiver for displaying said digital codes received from said receiver, said display showing an image sufficiently similar to that shown on the video display terminal to allow a user to determine the operational status of the data processing device.” These elements are entirely missing from the Edgard citation.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The anticipation rejection of claim 197 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5e. Claim 198

Unamended Claim 198 depends from claim 195 and recites that “said digital codes are transmitted to said remote location in response to a command received from said remote location requesting that said digital codes be transmitted.”

The Office Action cites Edgard’s column 4, lines 63-67, as allegedly disclosing claim 195. But the Edgard citation simply states that ASIC 50 determines when processor 10 can access video RAM 52, when the RAM 52 is providing information to the display drive circuitry, and when the RAM 52 is being refreshed. The Edgard citation makes no mention of the “character determiner” of claim 195 that generates digital codes “wherein said digital codes are transmitted to said remote location¹⁰ in response to a command received from said remote location requesting that said digital codes be transmitted.” The Edgard citation does not describe the reception of a command from a remote location requesting the transmission of the digital codes. Nor does the Edgard citation disclose the transmission of the digital codes to a remote location.

The anticipation rejection of claim 198 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

¹⁰ Or to “a remote location” if the amendment to claim 198 were entered.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

5f. Claim 199

The Office Action cites Edgard's column 4, lines 17-23, as allegedly disclosing claim 199. But the Edgard citation simply states that ASIC 50 determines when processor 10 can access video RAM 52, when the RAM 52 is providing information to the display drive circuitry, and when the RAM 52 is being refreshed. The Edgard citation does not disclose "a plurality of said microprocessor controlled computer hardware devices." Indeed, the Office Action never specifically identified the first such claimed device in the rejection of claim 194. The Edgard citation does not disclose "a network for interconnecting a plurality of said microprocessor controlled computer hardware devices with one another." Nor does the Edgard citation disclose "a network ... for allowing a user at said remote location to selectively access any one of said microprocessor controlled computer hardware devices or its associated data processing device." No "remote location" is disclosed. No "selective[] access [to] any one of said microprocessor controlled computer hardware devices" is disclosed. No "associated data processing device" is disclosed either.

The anticipation rejection of claim 199 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5g. Claim 200

The Office Action alleges that Edgard's column 10, lines 19-54, discloses the subject matter of claim 200. Edgard's column 10, lines 19-54, describes

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. The Edgard citation does not disclose “a controller coupled to said memory and said converter for monitoring changes to said image and for storing said digital codes representative of said changes in said memory, whereby said memory contains a series of image frames that can be used by an operator to determine the cause of a system failure.” The Office Action has not identified the “converter” initially recited in claim 194, and thus fails to identify “a memory connected with said converter for storing said digital codes to retain an image of the information displayed on the video display terminal.” Nor does the Office Action identify “a controller coupled to said memory and said converter.”

In addition, the Edgard citation does not disclose a memory that “contains a series of image frames that can be used by an operator to determine the cause of a system failure.” The Edgard citation does not mention a system failure, nor an operator being able to determine the cause of a system failure. In fact, the Edgard citation does not disclose “memory [that] contains a series of image frames.” As stated above, the Edgard citation discloses part of the process for reading characters from the memory. The concept of multiple image frames is not contemplated by the Edgard citation.

The anticipation rejection of claim 200 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5h. Claim 201

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The Office Action alleges that Edgard's column 10, lines 19-54, discloses the subject matter of claim 201. Edgard's column 10, lines 19-54, describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. The Edgard citation does not disclose "a trainer coupled to said character determiner for generating a predetermined character display and for storing said digital codes generated by said character determiner representative of each character on said predetermined display; and a comparator communicating with said trainer and said character determiner for comparing said digital codes generated for an unknown display on said video display terminal with said digital codes representative of each character displayed on said predetermined display, whereby the identity of each character displayed on said unknown display can be determined." The Edgard citation does not contemplate either a "trainer," nor a "comparator communicating with said trainer and said character determiner" These elements are simply missing from the Edgard citation.

The anticipation rejection of claim 201 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5i. Claim 202

The Office Action cites Edgard's column 2, lines 43-64, as disclosing the elements of claim 202. But the Edgard citation merely describes aspects of how the computer writes information to, and reads information from the computer's video memory. The cited portion of Edgard does not disclose any of the elements of claim 202 including a system "further comprising a synchronization signal

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

input circuit for receiving from the data processing device a horizontal synchronization signal, and a pixel clock generator connected with said synchronization signal input circuit and said converter for generating a pixel clock signal, wherein said data processing device is a personal computer, and said video raster signal input circuit comprises a circuit interconnected between said personal computer and the video display terminal.” The Edgard citation makes no mention of these elements.

The anticipation rejection of claim 202 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5j. Claim 203

Dependent claim 203 adds a whole host of elements to the system recited in dependent claim 195, which itself adds elements to the system recited in independent claim 194. The Office Action alleges that Edgard’s column 10, lines 19-54, and column 2, lines 43-64, disclose all aspects of claim 203. But the column 2 citation describes aspects of how the computer writes information to, and reads information from the computer’s video memory. The column 10 citation describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. Neither section, however, discloses the elements of claim 203 including a “video raster signal input circuit is coupled to said personal computer for receiving a video raster signal and a horizontal synchronization signal from said personal computer,” “a video signal output circuit coupled to said video display terminal and said video signal input circuit,” “a host site command input

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

circuit,” “a command output circuit coupled to said local command input circuit,” “a transmitter coupled to said converter and said command output circuit,” “a remote command input circuit at said remote location coupled to said transmitter,” “wherein the converter comprises a pixel clock generator,” and “whereby computer service personnel at the remote location can determine the present operating status of the file server, determine repair action to be taken if necessary, and initiate said repair action by transmitting commands to be executed by said personal computer to said personal computer.” These elements and aspects of claim 203 are not disclosed in the Edgard citation.

The anticipation rejection of claim 203 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5k. Claim 204

The Office Action alleges that Edgard’s column 2, lines 43-64, discloses the subject matter of claim 204. But the Edgard citation merely describes aspects of how the computer writes information to, and reads information from the computer’s video memory. The cited portion of Edgard does not disclose “converting the information contained in a video raster signal generated by a data processing device and displayed on a video display terminal associated with the data processing device, into a digital representation of that information for monitoring the information.”

Indeed, the Edgard citation does not disclose the use or manipulation of a “video raster signal.” Edgard’s column 2 citation describes the content of video

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

memory, which is digital. Claim 204's reference to a video raster signal refers to the video signal output from a computer that would normally be used to drive a video monitor. The digital content of a video memory is converted by video driving circuitry into the signal used to actually display an image on a video monitor – i.e., the video raster signal.

Edgard's column 2 citation does not disclose "converting the video raster signal into a digital signal representative of the information contained in the video raster signal independently from the data processing device." No such conversion is contemplated by the Edgard column 2 citation.

The anticipation rejection of claim 204 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

51. Claim 205

The Office Action cites Edgard's column 10, lines 19-54, as allegedly disclosing the subject matter of claim 205. Edgard's column 10, lines 19-54, describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. This portion of Edgard relates to how the information stored in video RAM 52 is read and what the information represents. The Edgard citation does not disclose a method in which the "converting step" recited in claim 204 includes "determining the identity of each character displayed on the video display terminal and generating a digital code indicative of the identity of said each character displayed on the video display terminal." Moreover, the Edgard citation does not disclose a method "wherein said step of generating a digital code comprises the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

step of generating a series of cyclic redundancy checks from the pixel information associated with each character location on the video display terminal.”

The anticipation rejection of claim 205 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5m. Claim 206

The Office Action cites Edgard’s column 4, lines 51-67, as allegedly disclosing the claimed method “further comprising the step of transmitting said digital codes to a remote location.” The Edgard citation describes aspects of the signal flow within or relating to ASIC 50. But the Edgard citation does not describe transmission of any data or code to a remote location. Thus, the anticipation rejection of claim 206 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5n. Claim 207

The Office Action alleges that Edgard’s column 4, lines 17-23, discloses claim 206. But column 4, lines 17-23, merely states that the video system 36 of Edgard’s computer handles the storage and display control functions for information to be displayed on CRT 38. This portion of Edgard simply discloses the particular type of video system used in the Edgard computer. The cited

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

portion of Edgard does not disclose a method including the steps of “receiving said digital codes transmitted to said remote location; and displaying said digital codes received from said remote location to create an image sufficiently similar to that shown on the video display terminal to allow a user to determine the operational status of the data processing device.” No remote location is discussed in the Edgard citation. No system is disclosed that allows the creation of an image similar to that shown on the remote video display so that a user can determine the operational status of the data processing device. These concepts are not contemplated in the Edgard citation.

The anticipation rejection of claim 207 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

50. Claim 208

The Office Action asserts that the subject matter of claim 208 is disclosed in Edgard’s column 4, lines 63-67. That portion of Edgard describes aspects of the signal flow within or relating to ASIC 50. The Edgard citation does not disclose a method including “transmitting said digital codes to said remote location is performed in response to a command received from said remote location requesting that said digital codes be transmitted.” The Edgard citation does not relate to the transmission of codes to a remote location, or such transmission in response to a command received from a remote location. Thus, the anticipation rejection of claim 208 should be withdrawn for each of the above reasons and for

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

the corresponding reasons set forth in the Declaration of Joseph C. McAlexander,
III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5p. Claim 209

The Office Action alleges that Edgard's column 10, lines 19-54, discloses the subject matter of claim 209. Edgard's column 10, lines 19-54, describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. This portion of Edgard relates to how the information stored in video RAM 52 is read and what the information represents. The column 10 citation does not remedy the deficiencies identified with respect to the rejection of claims 205 or 209. As explained above, this portion of Edgard does not disclose the subject matter of claims 205 or 209.

Moreover, the Edgard citation does not disclose a method including "storing said digital codes in a memory, whereby future unknown screen displays can be compared with said digital codes to determine the identity of characters displayed on said future unknown screen displays." The column 10 citation does not mention the concept of storing any codes so that future unknown screen displays can be compared to the codes to determine the identify of characters displayed on the future screen displays.

The anticipation rejection of claim 209 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

5q. Claim 210

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The Office Action alleges that Edgard's column 2, lines 43-64, discloses the steps of claim 210. This Edgard citation describes aspects of how the computer writes information to, and reads information from the computer's video memory. The cited portion of Edgard does not disclose a method including "receiving a horizontal synchronization signal from the data processing device," or "generating a pixel clock signal in synchronization with said horizontal synchronization signal, wherein said data processing device is a personal computer, and said video raster signal is intercepted between said personal computer and the video display terminal." Neither synchronization signals nor pixel clock generation are disclosed or implied in Edgard at column 2, lines 43-64, relied upon in the Office Action. Nor is there a discussion related to the interception of a video raster signal between a personal computer and a video display terminal.

The anticipation rejection of claim 210 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

6. Whether claims 123-125, 213-219 and 239 are anticipated under 35 U.S.C. § 102(b) by Gurley (U.S. Patent No. 5,036,315)

6a. Claims 123-125

With respect to claim 123, the Office Action alleges that Gurley's column 22, lines 52-66, discloses "plural host computer sites, each host computer site having at least one host computer, the at least one host computer including a host

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

processor, a host input device, and a host display device.” But Gurley citation does not disclose the host computer 10 as having “a host input device” or a “host display device.” The cited portion of Gurley merely states that the scheme for display of windowed graphic video information can be applied to multiple asynchronous computers on a single monitor. The Gurley citation does not state that host computer(s) 10 have an “input device” or a “display device.”

The Office Action also alleges that column 21, lines 17-21, of Gurley discloses “an on-screen display process, execution of the on-screen display process at the remote site providing a pop-up screen on the remote display device, the pop-up comprising a menu identifying the host computers at the plural host computer sites, the pop-up screen at least overlaying the video appearing on the remote display device as a result of the first connection; whereupon operation of the remote input device in response to the menu of the pop-up screen causes the remote site to terminate the first connection and to establish a second connection between a second selected host computer and the remote site.” But the cited portion of Gurley does not disclose an “on-screen display process” nor any of the claimed characteristics of the “on-screen display process.” the cited portion of Gurley states that the program running on SWMC 80 opens an “x-window” server, and a window for display controller 30 is dedicated. There is no mention of the claimed “on-screen display process.”

The anticipation rejection of claims 123-125 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

6b. Claim 213

The Office Action asserts that Gurley's column 13, lines 11-49, discloses "video buffer circuits to receive, respectively, red, green and blue analog video signals from the host server." This is an incorrect reading of this portion of Gurley. Gurley makes it clear that the display signal from host computer 10 is digital, and is not video. (Gurley, col. 4:50-57). It appears from the specification that RGB video signals 41, 43, 45 are generated in PIM 40 and sent to VIM 90 based on digital information received from host computer 10. (Gurley, col. 13:50-66). Thus, the Gurley citation does not disclose "video buffer circuits" that receive "red, green and blue analog video signals from the host server."

The Office Action also alleges that Gurley's column 16, lines 1-30, discloses "sync polarity circuits to receive, respectively, horizontal and vertical sync signals from the host server." But the references to sync signal 49 in this portion of Gurley refer to the sync signal that is generated in the VIM 90 based on the RGB video signals from SWMC 80 – not from host computer 10. (Gurley, col. 10:62-65). Sync signal 49 is routed to display controller 30 to ensure that the video signals generated from the display controller are synchronized to video signals 71, 73, 75 from PIM 70. (Gurley, col. 10, line 62-col. 11, line 9). Thus, the Gurley citation does not disclose "sync polarity circuits to receive, respectively, horizontal and vertical sync signals from the host server."

The Office Action alleges that Gurley's column 13, lines 11-49, discloses "analog to digital converters communicating with the video buffer circuits to receive the red, green and blue analog video signals and convert them to digital video signals." (Office Action, p. 16). But the cited portion of Gurley does not

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

mention analog to digital converters, much less A/D converters that communicate with video buffer circuit to convert the analog red, green and blue video signals to digital video signals. This claim element is simply not disclosed in the Gurley citation.

The Office Action alleges that Gurley's column 16, lines 1-30, discloses "a phase locked loop video dot clock circuit communicating with the sync polarity circuits and outputting a dot clock signal." Because the cited portion of Gurley does not disclose "the sync polarity circuits" recited in claim 213, column 16, lines 1-30, does not disclose the claimed "phase locked loop video dot clock circuit."

The Office Action alleges that Gurley's column 16, lines 1-30, discloses "a TTL converter receiving the digital video signals and converting them to a TTL format," and "a video processing circuit, including a cpu and a programmable gate array, connected to the sync polarity circuits, the phase locked loop video dot clock circuit, and the TTL converter to automatically determine a graphics mode of the red, green and blue analog video signals." Neither of these claim elements are disclosed in the cited portion of Gurley. Gurley's column 16, lines 1-30, does not mention a TTL converter at all. The Gurley citation also fails to mention a "video processing circuit" that includes a CPU and a programmable gate array connected to the sync polarity circuits, the phase locked loop video dot clock circuit, and the TTL converter. Moreover, the Gurley citation does not disclose any video processing circuit "to automatically determine a graphics mode of the red, green and blue analog video signals." These aspects of claim 213 are entirely missing from the cited portions of Gurley.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

The anticipation rejection of claim 213 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

6c. Claim 214

Claim 214 depends from claim 213 and recites “Dependent claim 214 recites that “the programmable gate array includes circuitry to determine a video frame rate characteristic of the red, green and blue analog video signals.” However, Gurley’s column 16, lines 1-30, does not disclose such a limitation. The cited portion of Gurley does not mention a “programmable gate array” much less such an array that “includes circuitry to determine a video frame rate characteristic of the red, green and blue analog video signals.” Thus, the anticipation rejection of claim 214 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

6d. Claim 215

Claim 215 depends from claim 213 and recites that “the graphics mode includes a number of available colors.” Gurley’s column 17, lines 19-48, does not disclose such a limitation. The cited portion of Gurley does not mention a circuit that determines a graphics mode of RGB video signals. Moreover, the Gurley citation does not disclose a graphics mode that includes “a number of available colors.” Thus, the anticipation rejection of claim 215 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

6e. Claim 216

Claim 216 depends from claim 213 and recites that “the graphics mode includes a screen resolution in horizontal pixels per screen by vertical pixels per screen.” Gurley’s column 16, lines 1-30, does not disclose such a limitation. The cited portion of Gurley does not mention a “graphics mode” that “includes a screen resolution in horizontal pixels per screen by vertical pixels per screen.” Thus, the anticipation rejection of claim 216 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

6f. Claim 217

Claim 217 depends from claim 213 and recites that “the graphics mode includes a table characterizing a number of available colors versus a screen resolution in horizontal pixels per screen by vertical pixels per screen.” Gurley’s column 17, lines 19-48, does not disclose such a limitation. The cited portion of Gurley does not mention a “graphics mode” that “includes a table characterizing a number of available colors versus a screen resolution in horizontal pixels per screen by vertical pixels per screen.” Thus, the anticipation rejection of claim 217 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

6g. Claim 218

However, Gurley's column 17, lines 19-48, does not disclose the limitation of claim 218. The cited portion of Gurley does not mention a "video processing circuit" that "includes memory to store a set of predefined video graphics mode characteristics." The cited portion of Gurley describes aspects of VIM 90 of Figure 5 including the video switch that selects inputs for display on the monitor 100. The Gurley citation does not mention a memory that stores predefined video graphics mode characteristics.

Moreover, the Gurley citation does not disclose a "the video processing circuit" that "divides the red, green and blue analog video signals into one or more video screen segment parts and compares the video screen segment parts to the stored predefined video graphics mode characteristics." These aspects of claim 218 are not contemplated by the cited portion of Gurley. Thus, the anticipation rejection of claim 218 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

6h. Claim 219

Claim 219 depends from claim 218 and recites that "the video processing circuit includes a video checksum manager for storing and managing checksums associated with each video screen segment part." Gurley's column 16, lines 31-63, does not disclose such a limitation. The cited portion of Gurley describes aspects of the sync/window daughterboard 370, including that the sync signal 149 is used

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

for the readout of data from the frame buffer 350 to circuit 360. The Gurley citation does not mention “a video checksum manager,” nor a video checksum manager “for storing and managing checksums associated with each video screen segment part.” These aspects of claim 219 are not disclosed in the Gurley citation. Thus, the anticipation rejection of claim 219 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

6i. Claim 239

The Office Action alleges that Gurley’s column 16, lines 31-63, discloses all elements of claim 239. The cited portion of Gurley describes aspects of the sync/window daughterboard 370, including that the sync signal 149 is used for the readout of data from the frame buffer 350 to circuit 360. The cited portion of Gurley does not disclose several of the aspects of claim 239. For example, Gurley does not disclose the communication of “RGB video information from a Host computer to a remote computer via a network link.” In Gurley, the video data from the host computer is converted and sent to the VIM 90 for display on monitor 100. The host video data is not sent to SWMC 80.

The Gurley citation does not disclose “video processing circuitry to digitize the RGB video information and to decode a video format of the RGB video information received by the video input circuitry.” The video information from the host computer is already in a digital form when it is output by the host computer 10. (Gurley, col. 4:50-59; col. 10:36-40). Thus, there is no circuit in the Gurley citation that digitizes the host computer’s video information. Moreover,

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

the Gurley citation does not disclose any circuit that “decode[s] a video format of the RGB video information received by the video input circuitry.”

The Gurley citation does not disclose “a flash palette converter circuit,” much less a flash palette converter circuit including “an address mux receiving the digitized RGB video information as a stream of digital RGB pixel data” and “a flash palette converter RAM being addressed by the stream of digital RGB pixel data and outputting for each RGB pixel a palette index byte corresponding to a color value of said RGB pixel.” The Gurley citation does not mention “an address mux” or a “flash palette converter RAM” for any purpose. Thus, these elements of claim 239 are not disclosed in the cited portion of Gurley.

The anticipation rejection of claim 239 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

7. Whether claim 193 is anticipated under 35 U.S.C. § 102(b) by Moore (U.S. Patent No. 5,287,461) (hereinafter Moore ‘461)

The Office Action alleges that Moore’s column 5, lines 11-34, discloses all elements of claim 193. But, at a minimum, the Moore citation does not disclose “a remote computer software utility, located at a remote site computer” including “a pop up menu utility providing at least a user choice at the remote site computer to obtain access to the host computer via the connection utility.” Presumably, the Office Action alleges that the access server 100 corresponds to the “hardware host

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

unit” and the remote access terminal 79 corresponds to the “remote site computer” recited in claim 193. The “serial port access program” referred to in the Moore citation is a program operating on access server 100. Thus, the “serial port access program” cannot correspond to the claimed “pop up menu utility,” and thus, does not disclose the “remote computer software utility” recited in claim 193.

The anticipation rejection of claim 193 should be withdrawn for each of the above reasons and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8. Whether claims 140, 145-151 and 169-183 are rendered obvious under 35 U.S.C. § 103(a) by the combination of Gurley in view of Sheets

8a. Claims 140 and 145-151

In addition to the proposed combinations of references not teaching all of claim limitation of claims 140 and 145-151 (as described in greater detail below), the Office Action has not identified evidence supporting its conclusion that one of ordinary skill in the art would have combined Gurley and Sheets in the manner claimed in claims 140 and 145-151. The Office Action states that Gurley discloses a video synchronization technique on a network, and Sheets discloses a basic LAN setup. (Office Action, p. 18). The Office Action then concludes that it would have been obvious to combine the cited portions of Gurley and Sheets “because Gurley specifically stated that a networked computer system could be used in implementation.” (Office Action, p. 18).

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

First, if Gurley were combined with Sheets' network 10 (which is the entire system shown in Sheets' Figure), it is unclear what portions of Gurley would remain since Sheets purports to disclose an entire, operable, and fully functional network that allegedly solves the stated problem of providing a local area network which can provide communication between a plurality of dissimilar terminals and can communicate with computer systems using incompatible formats. (Sheets, col. 1:34-38). Gurley, on the other hand, was attempting to solve a problem of displaying video information derived from multiple computers on windows of a single monitor. (Gurley, col. 3:66-co. 4:10). The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Sheets or Gurley that would have prompted that person to combine the teachings of Sheets with Gurley (or vice versa). Even if both references disclose or suggest the use of a network, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Gurley or Sheets the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Gurley and Sheets. For example, Gurley's DSCL 20, DC 30, PIM 40, VIM 90, and PIM 81 are described as essential for implementing the system described in Gurley. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet. Sheets describes the "stations 14 and 16, terminals 18, 20, 22 and 24, port selector 12, protocol converters 30, 32, 34, 36, modem sharing device 38, modems 40, 44, front end communications controller 50, and

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

computer 52 as being required elements of the Sheets system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet. Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Sheets with Gurley to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Sheets with Gurley, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Because Gurley cannot be properly combined with Sheets, as alleged in the Office Action, the Office Action has failed to establish that claims 140 and 145-151 are obvious based on the Gurley/Sheets combination.

8a1. Claim 140

Claim 140 depends from independent claim 136 and recites that “the computer processor includes a computer keyboard port and a computer video device port, the computer access interface including a dedicated link to the keyboard port for transmitting the keyboard signals to the computer processor and including another dedicated link to the video device port for receiving the analog video signals from the computer processor.” In rejecting claim 136, the Office Action appeared to allege that all elements of the claim were disclosed by Sheets’ port selector 12 or the stations/terminals 14, 16, 18, 20, 22, and 24. (Office Action, pp. 2-3). Yet, in rejecting dependent claim 140, the Office Action alleges that “the computer processor” of claim 136 is disclosed by Gurley at column 9,

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

lines 31-63. (Office Action, p. 18). These two assertions are inconsistent. Either the cited portions of Sheets disclose the “computer processor” of both claims, or the cited portions of Gurley disclose the “computer processor” of both claims.

Similarly, for claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 140, the Office Action alleges that the “computer access interface” is found in column 9, lines 31-63, of Gurley. (Office Action, p. 18). Once again, the Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer processor” and the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 140, the Office Action has not clearly indicated what part of Gurley described in column 9, lines 31-63, corresponds to the “computer processor” and “computer access interface” of dependent claim 140. (Office Action, p. 18). The cited portion of Gurley refers to several different components of the Gurley system including, for example, SWMC 80, mouse-keyboard-and/or-optional input devices 60, HC 10, optional-mouse-dials-function-keys-keyboard-data-tablet 50, DC 30, DSCC 20, control signals 31, 33, and monitor console 100. It is not possible to determine with any degree of certainty which of those elements allegedly correspond to the “computer processor” and “computer access interface” of dependent claim 140. Nevertheless, the Gurley citation does not teach or suggest “the computer processor” and “the computer

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

access interface” recited in claims 140 and 136. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 140.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 140 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C.

McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8a2. Claim 145

Claim 145 depends from claim 136 and recites that “the computer access interface further receives computer mouse commands from the computer processor and transmits the mouse commands on the non-dedicated serial channel to the remote access facility.” For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 145, the Office Action alleges that the “computer access interface” is found in column 9, lines 31-42, of Gurley. (Office Action, p. 18). The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 145, the Office Action has not clearly indicated what part of Gurley described in column 9, lines 31-42, corresponds to the “computer access interface” of dependent claim 145. (Office Action, p. 18). The cited portion of Gurley refers to several different components of the Gurley system including, for example, SWMC 80, mouse-keyboard-and/or-optional input

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

devices 60, HC 10, optional-mouse-dials-function-keys-keyboard-data-tablet 50, DC 30, DSCC 20, and control signals 31, 33. It is not possible to determine with any degree of certainty which of those elements allegedly correspond to the “computer access interface” of dependent claim 145. Nevertheless, the Gurley citation does not teach or suggest “the computer access interface” recited in claims 145 and 136. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 145.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 145 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8a3. Claim 146

Claim 146 depends from claim 136 and recites that “the computer access interface determines changes in the analog video signals and produces the digitized version of the analog video signals in accordance with the changes.” For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 146, the Office Action alleges that the “computer access interface” is found in column 22, lines 52-67, of Gurley. (Office Action, p. 18). The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

In addition, with respect to claim 146, the cited portion of Gurley is not pertinent to the subject matter recited in claim 146. The column 22 citation to Gurley simply states that the preceding portions of Gurley disclosed a generalized system for interleaved windowed graphics video information from asynchronous computers on a single monitor. The Gurley citation does not teach or suggest any device that “determines changes in the analog video signals and produces the digitized version of the analog video signals in accordance with the changes,” much less “the computer access interface” that “determines changes in the analog video signals and produces the digitized version of the analog video signals in accordance with the changes.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 146.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 146 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C.

McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8a4. Claim 147

Claim 147 depends on claim 136 and recites that “the computer access interface analyzes characteristics of the analog video signals and produces the digitized version of the analog video signals in accordance with results of said analysis of the analog video signal characteristics.” For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17,

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

lines 19-54, of Gurley. (Office Action, p. 19). The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 147, the cited portion of Gurley is not pertinent to the subject matter recited in claim 147. The Gurley citation describes the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest any device that “analyzes characteristics of the analog video signals and produces the digitized version of the analog video signals in accordance with results of said analysis of the analog video signal characteristics,” much less “the computer access interface” that “analyzes characteristics of the analog video signals and produces the digitized version of the analog video signals in accordance with results of said analysis of the analog video signal characteristics.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 147.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 147 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8a5. Claim 148

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 148 depends from claim 147 which depends from claim 136, and claim 148 recites that “the analog video signals include RGB information including RGB components and wherein the computer access interface produces the digitized version of the analog video signals by applying a digitization process to each RGB component of the RGB information.” For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17, lines 19-54, of Gurley. (Office Action, p. 19). For claim 148, the Office Action alleges that the “analog video signals” analyzed by the “computer access interface” of claim 147 are disclosed in Gurley’s column 17, lines 19-54. The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 148, the cited portion of Gurley is not pertinent to the subject matter recited in claim 148. The Gurley citation describes the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest any device that “produces the digitized version of the analog video signals by applying a digitization process to each RGB component of the RGB information,” much less “the computer access interface” that “produces the digitized version of the analog video signals by applying a digitization process to each RGB component of

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

the RGB information.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 148.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 148 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C.

McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8a6. Claim 149

Claim 149 depends from claim 136 via claims 148 and 147 and recites that “the digitization process includes analyzing phase characteristics of each RGB component.” For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17, lines 19-54, of Gurley. (Office Action, p. 19). For claim 148, the Office Action alleges that the “analog video signals” analyzed by the “computer access interface” of claim 147 are disclosed in Gurley’s column 17, lines 19-54. For claim 149, the Office Action alleges that the “digitization process” is also disclosed in Gurley’s column 17, lines 19-54. The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 149, the cited portion of Gurley is not pertinent to the subject matter recited in claim 149. The Gurley citation describes

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest a “digitization process [that] includes analyzing phase characteristics of each RGB component.” The VIM 90 does not analyze the video signals passing through it as required by claim 149. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 149.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 149 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C.

McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8a7. Claim 150

Claim 150 depends from claim 136 (via claims 148 and 147) and recites that “the digitization process includes analyzing amplitude characteristics of each RGB component.” For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17, lines 19-54, of Gurley. (Office Action, p. 19). For claim 148, the Office Action alleges that the “analog video signals” analyzed by the “computer access interface” of claim 147 are disclosed in Gurley’s column 17, lines 19-54. For claim 150, the Office Action alleges that the “digitization process” is also disclosed in Gurley’s column 17, lines 19-54. The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 150, the cited portion of Gurley is not pertinent to the subject matter recited in claim 150. The Gurley citation describes the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest a “digitization process [that] includes analyzing amplitude characteristics of each RGB component.” The VIM 90 does not analyze the video signals passing through it as required by claim 150. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 150.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 150 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C.

McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8a8. Claim 151

Claim 151 depends from claim 136 and recites that “the computer access interface includes hardware defining at least a local video port and wherein the computer access interface supports a video pass-thru mode for continuously applying the video signal to the local video port of the computer access interface.” For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 151, the Office Action alleges that the “computer access interface” is found in column 22, lines 52-67, of Gurley. (Office Action, p. 19). The Office

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 151, the cited portion of Gurley is not pertinent to the subject matter recited in claim 151. The column 22 citation to Gurley simply states that the preceding portions of Gurley disclosed a generalized system for interleaved windowed graphics video information from asynchronous computers on a single monitor. The Gurley citation does not teach or suggest a “computer access interface [that] includes hardware defining at least a local video port and wherein the computer access interface supports a video pass-thru mode for continuously applying the video signal to the local video port of the computer access interface.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 151.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 151 for the reasons set forth above and for the corresponding reasons set forth in the Declaration of Joseph C.

McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b. Claims 169-183

In addition to the proposed combinations of references not teaching all of claim limitation of claims 169-183 (as described in greater detail below), the Office Action has not provided a legally tenable explanation for why one skilled in the art would have combined Gurley and Sheets in the manner proposed by the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Office Action to arrive at the inventions of claims 169-183. The Office Action states that Gurley discloses a video synchronization technique on a network, and Sheets discloses a basic LAN setup. (Office Action, p. 19). The Office Action then concludes that it would have been obvious to combine the cited portions of Gurley and Sheets “because Gurley specifically stated that a networked computer system could be used in implementation.” (Office Action, p. 19).

First, if Gurley were combined with Sheets’ network 10 (which is the entire system shown in Sheets’ Figure), it is unclear what portions of Gurley would remain since Sheets purports to disclose an entire, operable, and fully functional network that allegedly solves the stated problem of providing a local area network which can provide communication between a plurality of dissimilar terminals and can communicate with computer systems using incompatible formats. (Sheets, col. 1:34-38). Gurley, on the other hand, was attempting to solve a problem of displaying video information derived from multiple computers on windows of a single monitor. (Gurley, col. 3:66-co. 4:10). The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Sheets or Gurley that would have prompted that person to combine the teachings of Sheets with Gurley (or vice versa). Even if both references disclose or suggest the use of a network, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Gurley or Sheets the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Gurley and Sheets. For example, Gurley’s DSCL 20, DC 30, PIM 40,

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

VIM 90, and PIM 81 are described as essential for implementing the system described in Gurley. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet. Sheets describes the “stations 14 and 16, terminals 18, 20, 22 and 24, port selector 12, protocol converters 30, 32, 34, 36, modem sharing device 38, modems 40, 44, front end communications controller 50, and computer 52 as being required elements of the Sheets system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet. Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Sheets with Gurley to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Sheets with Gurley, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Because Gurley cannot be properly combined with Sheets, as alleged in the Office Action, the Office Action has failed to establish that claims 169-183 are obvious based on the Gurley/Sheets combination.

8b1. Claims 169, 173 and 174

The Office Action states that independent claim 169 is rejected based on a combination of Gurley and Sheets. (Office Action, p. 18). But in applying the references to claim 169, the Office Action only cited to Gurley. No mention is made of Sheets and what application, if any, the Office Action makes of Sheets.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Thus, because only a single reference is used in the Office Action, the claim appears to be rejected as being anticipated by Gurley.

Claim 169 recites a “system for controlling a target computer from a remote workstation.” But the Office Action has not identified what portions of Gurley correspond to the “target computer” and what portions correspond to the “remote workstation.” Thus, the Office Action has not established that Gurley (or Sheets) discloses the system recited in claim 169.

The Office Action alleges that Gurley’s column 9, lines 6-42, discloses the “host processor and associated video memory and keyboard/mouse buffers.” Although the Office Action does not expressly identify the specific portion of Gurley that corresponds to the “host processor,” the cited portion of Gurley generally relates to the SWMC 80 and its peripherals.

The Office Action alleges that Gurley’s column 17, lines 19-54, discloses the “video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory.” (Office Action, p. 20). The cited portion of Gurley describes the VIM 90 shown in Figure 5. The Gurley citation describes the VIM 90 as a real-time, two-by-one, high speed video switch, and explains its components and their functions. There is no “video digitizer” or “video memory” disclosed in the cited portion of Gurley, much less a “video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory.”

The Office Action alleges that Gurley’s column 20, lines 29-42, discloses “a keyboard/mouse interface that receives keyboard and mouse signals from the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

remote workstation and stores them in the keyboard/mouse buffers.” (Office Action, p. 20). The cited portion of Gurley relates to the software running in the DC 30. The Gurley citation states that the microprocessor in DC 30 receives data from the mouse and keyboard devices 60 from SWMC 80. Since claim 169 requires the keyboard and mouse signals to be received from the remote workstation, the Office Action implies that SWMC 80 corresponds to the remote workstation. That implies that host computer 10 corresponds to the target computer of claim 169.

The Office Action alleges that Gurley’s column 9, lines 43-67, discloses “the host processor operating a remote access and control program that transmits the contents of the video memory to the remote workstation and receives the contents of the keyboard/mouse buffers from the remote workstation, both over a communication link.” The cited portion of Gurley generally describes allowing data from the keyboard and mouse devices associated with SWMC 80 to be sent to host computer 10. This data is transmitted according to an application program operating on SWMC 80.

The SWMC 80 cannot correspond to the “host processor” because SWMC 80 does not “transmit the contents of the video memory to the remote workstation.” According to the Office Action, SWMC 80 is the “remote workstation.” (See discussion of preceding claim element.). Thus, under the examiner’s view of the art, SWMC 80 transmits the contents of the video memory to itself. This is an incorrect reading of the claims. Moreover, the cited portion of Gurley does not describe the SWMC transmitting the contents of video memory to itself. Additionally, the video data stored by the “video digitizer” into the video

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

memory, and then transmitted by host processor, must be video data generated from analog video signals “from the target computer,” i.e., the host computer 10. But, as explained above, there is no “video digitizer” in the cited portions of Gurley.

Similarly, the cited portion of Gurley does not disclose a host processor that “receives the contents of the keyboard/mouse buffers from the remote workstation, both over a communication link.” Again, under the examiner’s view of the references, the SWMC 80 is the “remote workstation.” Thus, by citing a portion of Gurley describing the operation of the SWMC 80, the Office Action is asserting that SWMC 80 “receives the contents of the keyboard/mouse buffers from the remote workstation,” i.e., the SWMC 80 receives the data from itself. This is an incorrect reading of the claims. Moreover, the cited portion of Gurley does not describe SWMC 80 receiving the contents of keyboard/mouse buffers from itself.

The rejection of claim 169 is therefore unsupported. Claim 169 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009. Dependent claims 173 and 174 are patentable over the cited reference for at least the reasons provided above for claim 169.

8b2. Claim 170

Unamended Claim 170 depends from independent claim 169 and recites that “the host computer receives the keyboard and mouse signals from the remote workstation, stores the received keyboard and mouse signals in buffers and

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

fowards the contents of the keyboard/mouse buffers to a keyboard and mouse input on the target computer.” The Office Action cites Gurley’s column 12, lines 29-43, as disclosing the subject matter of claim 170. The Gurley citation describes aspects of the display controller 30. This citation states that a microprocessor in the display controller received the data developed by the mouse, keyboard (and other) devices 60 that is transferred from SWMC 80. But the Gurley citation does not describe the transmission the contents of keyboard/mouse buffers to host computer 10 – i.e., the alleged “target computer.” Thus, the rejection of claim 170 is unsupported. Claim 170 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009. If Claim 170 were amended as proposed in the unentered amendment, the Gurley citation would still not meet this limitation as it does not describe the transmission the contents of keyboard/mouse buffers to host computer 10 – i.e., the alleged “target computer.”

8b3. Claim 172

Claim 172 depends from claim 169 and recites that “the communication link is a telephone line.” The Office Action asserts that Gurley’s column 10, lines 19-45, discloses the subject matter of claim 172. But the cited portion of Gurley does not disclose a “communication link” between the “host processor” and the “remote workstation” being “a telephone line.” The Gurley citation refers to “host channel parallel interface cables 11” and “communications link cable(s) 21.” But a “telephone line” is not mentioned. Moreover, there is no evidence that a

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

telephone line would satisfy the requirements of the Gurley system. By referring to specific types of parallel and communication cables, Gurley implies that a simple telephone line would not satisfy Gurley's system requirements. The rejection of claim 172 is therefore unsupported. Claim 172 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b4. Claim 175

Claim 175 depends from claim 169 and recites "the video digitizer includes a phase lock loop that produces a clocking signal having a frequency substantially equal to the time at which pixel values are transmitted in the video signal and a gating counter that passes the clocking signal to an analog to digital converter that samples the video signal during an active video portion of the video signal." The Office Action cites Gurley's column 16, lines 1-30, as disclosing the subject matter of claim 175. Column 16, lines 1-30, describes aspects of the display controller 30. But for claim 169, the Office Action alleged that the "video digitizer" corresponded to VIM 90. Thus, for claim 175, the Office Action inconsistently alleges that the same "video digitizer" corresponds to portions of the display controller 30. The "video digitizer" cannot correspond to one device for claim 169, and a second, different device, for claim 175. The rejection of claim 175 is therefore unsupported. Claim 175 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b5. Claim 176

Claim 176 depends from claim 169 and recites that “the video digitizer alternatively samples a single color video signal in a frame of video data and stores the samples in the video memory.” The Office Action alleges that Gurley’s column 13, lines 40-66, discloses the subject matter of claim 176. With respect to claim 169, the Office Action alleged that the VIM 90 corresponded to the “video digitizer.” But with claim 176, the Office Action cites a portion of Gurley that generally relates to communication with SWMC 80 and DC 30. Although the VIM is mentioned in the citation, there is no substantial discussion of the VIM apart from the VIM receiving video signals. The current Gurley citation does not disclose a circuit that digitizes video signals, and thus, no “video digitizer” is disclosed in the column 13 citation. Moreover, the Gurley citation does not disclose any circuit (much less a “video digitizer”) that “alternatively samples a single color video signal in a frame of video data and stores the samples in the video memory.” Thus, the cited portion of Gurley does not disclose the subject matter of claim 176.

The rejection of claim 176 is therefore unsupported. Claim 176 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b6. Claim 177

Claim 177 recites a “video digitizer” for receiving analog video signals at multiple resolutions, and for storing video signals in a video memory of a host computer. The Office Action alleges that Gurley’s column 14, lines 39-51, discloses “a synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal.” (Office Action, p. 21). The cited portion of Gurley relates to the display controller 30, and to the sync/window daughter board 370 in the display controller. The details of the sync/window daughter card are show in detail in Figure 4. Neither Figure 4, nor the cited portion of Gurley, discloses a “video digitizer” that includes a “synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal.”

The Office Action also alleges that Gurley’s column 16, lines 1-30, discloses “a microprocessor that determines a clocking rate at which the analog video signal should be sampled from the timing of the vertical and horizontal synchronize signals.” The cited portion of Gurley describes a pixel clock that controls the timing and rate at which data is read from a frame buffer. The Gurley citation does not disclose a microprocessor that determines a clocking rate at which an analog video signal should be sampled as part of a video digitizer.

Gurley’s column 16, lines 1-30, is also relied upon as allegedly disclosing “an analog to digital converter that is controlled by the clock signal to sample the analog video signal” and “a bus interface circuit that writes the samples of the analog video signal into the video memory of the host computer.” But the cited portion of Gurley does not disclose either of these claim elements. No analog-to-

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

digital converter is disclosed. Moreover, the cited portion does not disclose a “bus interface circuit that writes the samples of the analog video signal into the video memory of the host computer.” The cited portion of Gurley describes aspects of the sync/window daughterboard 370 in the display controller 30. This daughtercard is not part of the host computer. Moreover, the output of the daughtercard is not delivered or transmitted to the host computer 10. Instead, the video signals from the display controller are sent to the VIM 90, and then, when appropriate, on to the monitor 100. Thus, the cited portion of Gurley does not disclose the subject matter of claim 177.

The rejection of claim 177 is therefore unsupported. Claim 177 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b7. Claim 178

Claim 178 depends from claim 177 and recites additional details about the clock signal generator. The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 178. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a “phase lock loop circuit,” a “variable oscillator,” an “analog to digital converter,” or a “programmable divider.” Other aspects of Gurley state that the daughtercard includes a phase lock loop, but there is no disclosure that the phase lock loop “compares the phase of the horizontal synchronize signal with the phase of a divided clocking signal.”

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Moreover, none of the other claimed limitations of the “variable oscillator,” the “analog to digital converter,” or the “programmable divider” are disclosed in the cited portion of Gurley. Thus, the cited portion of Gurley does not disclose the subject matter of claim 178.

The rejection of claim 178 is therefore unsupported. Claim 178 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b8. Claim 179

Claim 179 depends from claim 178 and recites “a gating circuit that receives the clocking signal and passes the clocking signal to the analog to digital converter during an active video portion of the analog video portion of the analog video signal.” The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 179. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not mention a video digitizer including “a gating circuit that receives the clocking signal and passes the clocking signal to the analog to digital converter during an active video portion of the analog video portion of the analog video signal.” No “gating circuit” or “analog to digital converter” are mentioned in the Gurley citation. Moreover, there is no discussion of passing a clocking signal to an analog to digital converter “during an active video portion of the analog video portion of the analog video signal.” These aspects of claim 179 are simply not taught or suggested by the cited portion of

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Gurley. Thus, the cited portion of Gurley does not disclose the subject matter of claim 179.

The rejection of claim 179 is therefore unsupported. Claim 179 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b9. Claim 180

Claim 180 depends from claim 178 and recites “a phase adjust circuit that adjusts the phase of the clocking signal.” The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 180. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a video digitizer including “a phase adjust circuit that adjusts the phase of the clocking signal.” The cited portion of Gurley does not teach or suggest a “phase adjust circuit” for a clocking signal. Thus, the cited portion of Gurley does not disclose the subject matter of claim 180.

The rejection of claim 180 is therefore unsupported. Claim 180 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b10. Claim 181

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Claim 181 depends from claim 177 and recites “a selection circuit that alternatively selects a red, green, and blue component on the analog video signal to be sampled by the analog to digital converter.” The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 181. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not mention a video digitizer including “a selection circuit that alternatively selects a red, green, and blue component on the analog video signal to be sampled by the analog to digital converter.” No “selection circuit” or an “analog to digital converter” are taught or suggested in the cited portion of Gurley. Thus, the cited portion of Gurley does not disclose the subject matter of claim 181.

The rejection of claim 181 is therefore unsupported. Claim 181 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b11. Claim 182

Claim 182 depends from claim 177 and recites that “the analog to digital converter includes separate analog to digital converters to sample the red, green, and blue components of the analog video signal.” The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 182. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a video digitizer in which an “analog to digital converter includes separate analog to

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

digital converters to sample the red, green, and blue components of the analog video signal.” The cited portion of Gurley does not teach or suggest an “analog to digital converter,” much less the specific analog to digital converter recited in claim 182. Thus, the cited portion of Gurley does not disclose the subject matter of claim 182.

The rejection of claim 182 is therefore unsupported. Claim 182 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

8b12. Claim 183

Claim 183 depends from claim 177 and recites that “the host computer operates a remote access and control program that transmits the contents of the video memory to a remote computer system.” The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 183. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a video digitizer or a “host computer [that] operates a remote access and control program that transmits the contents of the video memory to a remote computer system.” No “host computer” or “remote access and control program” are taught or suggested in the cited portion of Gurley. Indeed, in Gurley, video information from the host computer is not sent to “a remote computer system.” Instead, at least some of the video information from host computer 10 is delivered to VIM 10 and displayed on monitor 100. The video information from host computer 10 is

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

not delivered to SWMC 80. Thus, the cited portion of Gurley does not disclose the subject matter of claim 183.

The rejection of claim 183 is therefore unsupported. Claim 183 is patentable over the cited reference for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

9. Whether claims 126-128, 152 and 153 are rendered obvious under 35 U.S.C. § 103(a) by the combination of Gurley in view of Lemon

9a. There is no motivation to combine the references to arrive at the inventions of claims 126-128, 152 and 153

In addition to the proposed combinations of references not teaching all of claim limitation of claims 126-128, 152 and 153 (as described in greater detail below), the Office Action has not provided a legally tenable explanation for why one skilled in the art would have combined Gurley and Lemon to arrive at the inventions claimed in claims 126-128, 152 and 153. The Office Action states that Gurley discloses a video synchronization system between host computers.¹¹ (Office Action, p. 22). The Office Action also alleges that Lemon discloses a remote rebooting system for networked computers. (Office Action, p. 22). The Office Action then concludes that it would have been obvious to combine the cited portions of Gurley and Lemon “in order to allow for remote control of a locked computer system.” (Office Action, p. 22).

¹¹ Although for other claims, the Office Action has previously alleged that the video synchronization occurs between a host computer (i.e., host computer 10) and a remote computer (i.e., SWMC 80).

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

First, if Gurley were combined with Lemon's system (which is the entire system shown in Lemon's Figure 2), it is unclear what system would result from that combination. Gurley is directed to the problem of displaying video information derived from multiple computers on windows of a single monitor. (Gurley, col. 3:66-co. 4:10). Lemon is directed to an improved system for distributing coupons for retail sales of merchandise. (Lemon, col. 1:7-12). Lemon discloses a single computer (host unit H) communicating through modems to terminals T that print the coupons. Although the terminals are electronic devices, the terminals are not computers and are not described as computers in Lemon. The terminals are just that – terminals that, in certain instances, send data to, and receive commands from, the host computer and print coupons accordingly. The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Lemon or Gurley that would have prompted that person to combine the teachings of Lemon with Gurley (or vice versa). Even if both references disclose or suggest the use of computers, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Gurley or Lemon the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Gurley and Lemon. For example, Gurley's DSCC 20, DC 30, PIM 40, VIM 90, and PIM 81 are described as essential for implementing the system described in Gurley. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

combining Gurley with Lemon. Lemon describes the host computer H, modem M, and terminals T1-Tn as being required elements of the Lemon system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Lemon. Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Lemon with Gurley to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Lemon with Gurley, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Because Gurley cannot be properly combined with Lemon, as alleged in the Office Action, the Office Action has failed to establish that claims 126-128, and 152-153 are obvious based on the Gurley/Lemon combination.

9b. Claim 126

Claim 126 depends from claim 125 and recites that “at least one of the plural host computer sites comprises a daisy chained configuration of host computers.” The Office Action makes no allegation as to whether the limitation of claim 126 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 126 does not claim a “remote reboot system.” Thus, the mention in Lemon of sending reboot commands to the terminals to update coupon data is not relevant to whether claim 126 is patentable over Gurley and Lemon.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Moreover, Lemon does not teach or suggest “at least one of the plural host computer sites comprises a daisy chained configuration of host computers,” as recited in claim 126. The Office Action has not specified what part of Lemon corresponds to the alleged “plural host computer sites” of claim 126, much less a computer site having “a daisy chained configuration of host computers.” Lemon’s figure 2 does not disclose a “daisy chained configuration” of terminals, much less host computers. Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 126.

The rejection of claim 126 is therefore unsupported. Claim 126 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

9c. Claim 127

The Office Action makes no allegation as to whether the limitation of claim 127 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 127 recites subject matter beyond the concept of a “remote rebooting system for networked computers.” For example, the Office Action does not allege that Gurley or Lemon teach or suggest “the plural host computer sites compris[ing] a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for each of the host computers the host unit is

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

connected between the host computer and a source of power for the host computer.” Moreover, Lemon does not teach or suggest a system in which “upon receipt of the cold boot command from the remote site the host unit temporarily interrupts power to the host processor of the host computer.” In the cited portion of Lemon, all that is disclosed is that the terminal T receives a reboot command, and apparently reboots itself. There is no teaching or suggestion that Lemon’s terminals are rebooted in the manner recited in claim 127 – i.e., when a cold boot command is received from the remote site, “the host unit temporarily interrupts power to the host processor of the host computer.” Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 127.

The rejection of claim 127 is therefore unsupported. Claim 127 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

9d. Claim 128

The Office Action makes no allegation as to whether the limitation of claim 128 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 128 does not recite a “remote reboot system.” Thus, the mention in Lemon of sending reboot commands to the terminals to update coupon data is not relevant to whether claim 126 is patentable over Gurley and Lemon.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Moreover, claim 128 does not teach or suggest a system as recited in claim 125 “wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers.” Lemon does not describe host computers in a daisy chained configuration. Nor does it describe a daisy chain configuration of host computer “including a host unit associated with each of the host computers.” The subject matter of claim 128 is not described or suggested by Lemon and the Office Action makes no allegation otherwise. Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 128.

The rejection of claim 128 is therefore unsupported. Claim 128 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

9e. Claim 152

The Office Action rejects claim 152 as being obvious based on the combination of Gurley in view of Lemon. (Office Action, p. 22). But claim 152 depends from independent claim 136. Claim 136 was rejected because it was allegedly anticipated by Sheets. (Office Action, p. 2). Because the rejection of claim 152 does not mention how or if Sheets applies to that rejection, it appears that the obviousness rejection of claim 152 is improper. For example, the Office Action does not provide evidence of how (or if) one skilled in the art at the time of the invention would have been motivated to combine or modify Sheets with

Application of: Perholtz, R. and Elmquist; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Gurley and/or Lemon. The Office Action fails to describe how one skilled in the art would have chosen to combine the systems of Sheets, Lemon and Gurley. The Office Action does not describe what portions (if any) of the systems described in Sheets, Lemon and Gurley would have been retained in the combination and what portions (if any) would have been eliminated from the combination. In short, it appears that the Office Action has provided no basis supporting a combination based on Sheets, Lemon and Gurley. Moreover, if the rejection of claim 152 is only based on Gurley and Lemon, then the rejection is incomplete for the further reason that the Office Action does not identify what portions of Lemon or Gurley disclose or suggest the elements of claim 136.

In addition, the Office Action makes no allegation as to whether the subject matter of claim 152 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 152 recites subject matter beyond the concept of a “remote rebooting system for networked computers.” For example, the Office Action does not allege that Gurley or Lemon teach or suggest a system “wherein the computer processor receives AC power and the computer access interface receives a request to break the AC power and then coordinates a break in the AC power to the computer processor.” In the cited portion of Lemon, all that is disclosed is that the terminal T receives a reboot command, and apparently reboots itself. There is no teaching or suggestion that Lemon’s terminals are rebooted in the manner recited in claim 152 – i.e., when a “computer access interface receives a request to break the AC power,” it “then

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

coordinates a break in the AC power to the computer processor.” Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 152.

The rejection of claim 152 is therefore unsupported. Claim 152 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

9f. Claim 153

The Office Action makes no allegation as to whether the limitation of claim 153 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 153 recites subject matter beyond the concept of a “remote rebooting system for networked computers.” For example, the Office Action does not allege that Gurley or Lemon teach or suggest a system “further including a power break component receiving the AC power and delivering the AC power to the computer processor.” Moreover, Gurley and Lemon are not alleged to teach or suggest a “computer access interface [that] delivers a power break command signal to the power break component upon receipt of the request to break.” In the cited portion of Lemon, all that is disclosed is that the terminal T receives a reboot command, and apparently reboots itself. There is no teaching or suggestion that Lemon’s terminals are rebooted in the manner recited in claim 153 – i.e., with a “power break component” wherein “the

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

computer access interface delivers a power break command signal to the power break component upon receipt of the request to break.” Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 153.

The rejection of claim 153 is therefore unsupported. Claim 153 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

10. Whether claims 154-156 and 222-226 are rendered obvious under 35 U.S.C. § 103(a) by the combination of Farrand (U.S. Patent No. 5,444,849) in view of Sheets

- 10a. There is no motivation to combine the references to arrive at the inventions of claims 154-156 and 222-226

In addition to the proposed combinations of references not teaching all of claim limitation of claims 154-156 and 222-226 (as described in greater detail below), the Office Action has not provided a legally tenable explanation for why one skilled in the art would have combined Farrand and Sheets to arrive at the inventions of claim 154-156 and 222-226. The Office Action states that Farrand discloses a network management system which notified an administrator on the occurrence of various events in the network. (Office Action, p. 22). The Office Action also alleges that Farrand supports reboot of a system. (Office Action, p. 22). The Office Action then concludes that it would have been obvious to combine the cited portions of Farrand and Sheets because it

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

would have been obvious “to use Farrand with the network taught by Sheets since Sheets was a LAN and Farrand was designed for use with a LAN.” (Office Action, p. 22).

First, if Farrand were combined with Sheets’ system (which is the entire system shown in Sheets’ Figure), it is unclear what system would result from that combination. Sheets is directed to allowing computer 52 to communicate through various protocol converters 30, 32, 34, 36 and port selector 12 to the stations and terminals 14, 16, 18, 20, 22, 24. (Sheets, Figure, and col. 2:1-6). Farrand is directed to a system manager for a computer system and in particular to a protocol for asynchronous data transfers between a remote system manager facility and the system manager. (Farrand, col. 1:40-44). The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Farrand or Sheets that would have prompted that person to combine the teachings of Farrand with Sheets (or vice versa). Even if both references disclose or suggest the use of computer networks, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Farrand or Sheets the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Farrand and Sheets. For example, Sheets’ stations and terminals 14, 16, 18, 20, 22, 24, the port selector 12, the protocol converters 30, 32, 34, 36, modem sharing device 38, modems 40, 44, front end communications controller 50, and computer 52 are all described as essential for implementing the system of Sheets. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Farrand with Sheets. Farrand describes the EISA server 12, asynchronous link 40 (which may be a telephone connection), network 28, and

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

computer station 30 as required elements of the Farrand system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Farrand with Sheets. Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Farrand with Sheets to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Farrand with Sheets, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Additionally, the Office Action provides no evidence of how the Farrand and Sheets systems would be aligned in a combination of the systems. Sheets identifies its network as network 10 – i.e., the entire system shown in the Figure. (Sheets, col. 3, line 15). This type of “network” is entirely different from the networks described for use in Farrand, including Token ring, Ethernet, etc. (Farrand, col. 6:2-5). The Office Action does not identify where one skilled in the art would insert the Farrand EISA server 12, for example, into Sheets’ network 10. Thus, I do not agree that one skilled in the art at the time of the present invention would have been motivated to combine Farrand and Sheets, much less combine those references in a manner that renders the claims obvious.

Because Farrand cannot be properly combined with Sheets, as alleged in the Office Action, the Office Action has not established that claims 154-156, and 222-226 are obvious based on the Farrand/Sheets combination.

10b. Claim 154

With respect to claim 136, the Office Action appeared to allege that the “computer access interface” corresponded to terminals 22 and 24. But for claim 154, the Office

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Action cites Farrand for the alleged disclosure of “computer access interface” because Farrand allegedly discloses a system that provides alerts to an administrator. Thus, the Office Action is reading the cited references inconsistently. Either Farrand or Sheets must be relied upon for allegedly disclosing the “computer access interface.” The Office Action cannot properly cite Sheets for that disclosure for claim 136, and then rely on Farrand for that alleged disclosure in dependent claim 154.

Giving the Office Action a flexible reading, the Office Action appears to allege that Farrand’s column 10, lines 8-30, and column 12, lines 20-67, disclose the subject matter of claim 154. But nothing in those cited portions of Farrand discloses a system that “generat[es] an outgoing phone call to a predefined page number whenever a remote access user of the remote access facility fails to enter an appropriate access code.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 154.

The rejection of claim 154 is therefore unsupported. Claim 154 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

10c. Claim 155

With respect to claim 136, the Office Action appeared to allege that the “computer access interface” corresponded to terminals 22 and 24. But for claim 155, the Office Action cites Farrand for the alleged disclosure of “computer access interface” because Farrand allegedly discloses a system that provides alerts to an administrator. Thus, the Office Action is reading the cited references inconsistently. Either Farrand or Sheets

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

must be relied upon for allegedly disclosing the “computer access interface.” The Office Action cannot properly cite Sheets for that disclosure for claim 136, and then rely on Farrand for that alleged disclosure in dependent claim 155.

Giving the Office Action a flexible reading, the Office Action appears to allege that Farrand’s column 10, lines 8-30, and column 12, lines 20-67, disclose the subject matter of claim 155. But nothing in those cited portions of Farrand discloses a system that “generates a predefined audio signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.” Farrand’s voice synthesis logic 82 does not generate any predefined audio signals “whenever a remote access user establishes communication with the computer access interface via the remote access facility.” Instead, the voice synthesis logic generates audio signals when particular alert conditions exist. Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 155.

The rejection of claim 155 is therefore unsupported. Claim 155 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

10d. Claim 156

With respect to claim 136, the Office Action appeared to allege that the “computer access interface” corresponded to terminals 22 and 24. But for claim 156, the Office Action cites Farrand for the alleged disclosure of “computer access interface” because Farrand allegedly discloses a system that provides alerts to an administrator. Thus, the Office Action is reading the cited references inconsistently. Either Farrand or Sheets

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

must be relied upon for allegedly disclosing the “computer access interface.” The Office Action cannot properly cite Sheets for that disclosure for claim 136, and then rely on Farrand for that alleged disclosure in dependent claim 156.

Giving the Office Action a flexible reading, the Office Action appears to allege that Farrand’s column 10, lines 8-30, and column 12, lines 20-67, disclose the subject matter of claim 156. But nothing in those cited portions of Farrand discloses a system that “generates a predefined visual signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.” The Farrand citations do not disclose the generation of a predefined visual signal when a remote user establishes communication with the computer access interface via the remote access facility. At most, the voice synthesis logic 82 generates audio signals when particular alert conditions exist. Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 156.

The rejection of claim 156 is therefore unsupported. Claim 156 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

10e. Claim 222

The Office Action has not identified where in Farrand or Sheets each of the elements of independent claim 222 are alleged to be taught or suggested. I understand that, at a minimum, a proper rejection must show where each cited reference, alone or in combination with other references, teaches or suggests each element of the rejected

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

claim. Thus, because the Office Action fails to do this, it appears that the rejection of claim 222 (and its dependent claims) is incorrect for at least this reason.

More specifically, the Office Action does not allege that the Farrand/Sheets combination teaches or suggests “a remote access device to remotely control a host computer and to receive at a remote location a video signal from the host computer.” The combination is not alleged to teach or suggest “a remote access engine between the host computer and the remote location to coordinate delivery of data packets along a telecommunications link between the host computer and the remote location.” Nor is the combination alleged to teach or suggest “a remote access controller, including a remote access control card communicating with the telecommunications link, to read a present caller ID associated with the remote location, to store a list of predefined caller IDs, to compare the present caller ID with the list and to disable the remote access engine whenever the present caller ID fails to match any from the list of predefined caller IDs.” The Office Action alleges that Farrand discloses video and audio alerts to an administrator, but Farrand is not alleged to disclose the elements recited in claim 222. Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 222.

The rejection of claim 222 is therefore unsupported. Claim 222 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

10f. Claim 223

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Although Farrand is cited to the generation of alerts to an administrator, the cited portions of Farrand do not teach or suggest a system that “automatically issue[s] a page alert to a predefined telephone number whenever the present caller ID fails to match any from the list of predefined caller IDs.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 223.

The rejection of claim 223 is therefore unsupported. Claim 223 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

10g. Claim 224

The Office Action does not allege that the Farrand/Sheets combination teaches or suggests the subject matter of claim 224. Indeed, the cited portions of Farrand (upon which the Office Action seems to rely most heavily for claims 222-226) do not teach or suggest a system in which “the remote access controller further resets the host computer wherever the predefined caller ID matches the present caller ID.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 224.

The rejection of claim 224 is therefore unsupported. Claim 224 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

10h. Claim 225

The Office Action does not allege that the Farrand/Sheets combination teaches or suggests the subject matter of claim 225. Indeed, the cited portions of Farrand (upon which the Office Action seems to rely most heavily for claims 222-226) do not teach or suggest a system in which “the remote access controller further reboots the host computer wherever the predefined caller ID matches the present caller ID.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 225.

The rejection of claim 225 is therefore unsupported. Claim 225 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

10i. Claim 226

The Office Action does not allege that the Farrand/Sheets combination teaches or suggests the subject matter of claim 226. Indeed, the cited portions of Farrand (upon which the Office Action seems to rely most heavily for claims 222-226) do not teach or suggest a system “further including an external modem and a control module providing AC power to the host computer, the external modem communicating with the control module and automatically answering calls received by the external modem on a different telecommunications link, said control module temporarily interrupting power to the host computer whenever said external modem automatically answers a call.” I do not find a teaching or suggestion of these claim elements in the cited portions of Sheets either.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 226.

The rejection of claim 226 is therefore unsupported. Claim 226 is patentable over the cited references for at least the reasons provided above and for the corresponding reasons set forth in the Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009.

Conclusion

It is respectfully submitted for the reasons set forth above, the outstanding rejections of claims 123-128, 136-140, 144-162, 165-170, 172-183, 186-190, 193-226 and 239-246) should be REVERSED.

CUSTOMER NUMBER

42624

Respectfully submitted,

By:



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CHARGE STATEMENT: Deposit Account No. 501860, order no. 2540-0550.

The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

(viii). CLAIMS APPENDIX

A copy of the claims involved in the appeal is shown below without the amendments made May 11, 2009 in the Amendment After Filing a Notice Of Appeal as that Amendment was refused entry. A marked-up copy of the claims as they would appear is included in section (xi) should the Board decide that entry of those Amendments is proper.

1. (Original) A computer monitoring system for monitoring information displayed on a video display terminal connected to, and receiving display information from, a data processing device comprising:

video raster signal input means for receiving a video raster signal representative of said information displayed on the video display terminal from the data processing device; and

conversion means connected to said video raster signal input means for converting said video raster signal into a digital signal representative of said information contained in said video raster signals,

said conversion means comprising character determination means for determining an identity of each character displayed on the video display terminal and for generating a digital code indicative of said identity of said each character displayed on the video display terminal,

said character determination means comprising circuitry for generating a series of cyclic redundancy checks, wherein each said cyclic redundancy check is generated from pixel information associated with each character location on the video display terminal.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

2. (Original) The system of claim 1 further comprising transmission means connected with said conversion means for transmitting said digital code to a remote location.

3. (Original) The system of claim 2 further comprising:
reception means at said remote location connected with said transmission means for receiving said digital code transmitted by said transmission means; and

remote video display means connected with said reception means for displaying said digital code received from said reception means, said remote video display means showing an image substantially the same as that shown on the video display terminal to allow a user to determine the operational status of the data processing device.

4. (Original) The system of claim 3 wherein said digital code is transmitted to said remote location in response to a command received from said remote location requesting that said digital code be transmitted.

5. (Original) The system of claim 4 further comprising interconnection means for interconnecting a plurality of said computer monitoring systems with one another and for allowing a user at said remote location to selectively access any one of said computer monitoring systems.

6. (Original) The system of claim 1 further comprising:
memory means connected with said conversion means for storing said digital code to retain an image of said information displayed on the video display terminal; and
control means connected to said memory means and said conversion means for monitoring changes to said image and for storing said digital code representative of said changes in said memory means, such that said memory means contains a series of image frames that can be used by an operator to determine the cause of a system failure.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

7. (Original) The system of claim 1 further comprising:
training means connected to said character determination means for generating a predetermined character display, for operating said character determination means to generate digital codes representative of an identity of each character in said predetermined character display, and for storing said digital codes generated by said character determination means; and

comparison means connected with said training means and said character determination means for comparing digital codes generated by said character determination means for an unknown display on said video display terminal with said digital codes representative of each character on said predetermined display, such that said identity of each character displayed on said unknown display can be determined.

8. (Original) The system of claim 1 further comprising:
synchronization signal input means for receiving from the data processing device a horizontal synchronization signal; and

pixel clock generating means connected with said synchronization signal input means and said conversion means for generating a pixel clock signal.

9. (Original) The system of claim 1 wherein said data processing device is a personal computer, and said video raster signal input means comprises a circuit interconnected between said personal computer and the video display terminal.

10. (Original) The system of claim 2 wherein said transmission means comprises a standard public switched telephone line.

11. (Original) A method of receiving, analyzing and converting information contained in an analog video raster signal generated by a data processing device and

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

displayed on a video display terminal associated with the data processing device, into a digital representation of that information comprising the steps of:

receiving the analog video raster signal generated by the data processing device;

converting said analog video raster signal into a digital signal representative of said information contained in said video raster signal,

said converting step including the steps of:

determining an identity of each character displayed on the video display terminal;
and

generating a digital code indicative of said identity of said each character displayed on the video display terminal,

wherein said step of generating a digital code comprises the step of generating a series of cyclic redundancy checks from pixel information associated with each character location on the video display terminal.

12. (Original) The method of claim 11 further comprising the step of transmitting said digital codes to a remote location.

13. (Original) The method of claim 12 further comprising the steps of:
receiving said digital codes transmitted to said remote location; and
displaying said digital codes to create an image substantially the same as that shown on the video display terminal to allow a user to determine an operational status of the data processing device.

14. (Original) The method of claim 13 wherein said step of transmitting said digital codes to said remote location is performed in response to a command received from said remote location requesting that said digital codes be transmitted.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

15. (Original) The method of claim 12 wherein said digital codes are transmitted to said remote location using a standard public switched telephone line.

16. (Original) The method of claim 11 further comprising the steps of: analyzing a predetermined character sequence displayed on the video display terminal to determine an identity of each character displayed on said video display terminal;

generating a digital code representative of each character in said predetermined character sequence displayed on said video display terminal; and

storing said digital codes in a memory.

17. (Original) The method of claim 11 further comprising the steps of: receiving a horizontal synchronization signal from the data processing device; and generating a pixel dock signal in synchronization with said horizontal synchronization signal.

18. (Original) The method of claim 11 wherein said data processing device is a personal computer, and said video raster signal is intercepted between said personal computer and the video display terminal.

19. (Original) A computer implemented method of converting information contained in a video raster signal generated by a data processing device and displayed on a video display terminal associated with the data processing device, into a digital representation of that information comprising the computer implemented steps of:

receiving the video raster signal generated by the data processing device; and converting said video raster signal into a digital signal representative of said information contained in said video raster signal,

said converting step including the steps of:

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

determining an identity of each character displayed on the video display terminal;
and

generating a digital code indicative of said identity of said each character
displayed on the video display terminal,

wherein said step of generating a digital code comprises the step of generating a
series of cyclic redundancy checks from pixel information associated with each character
location on the video display terminal.

20. (Original) A computer monitoring system for monitoring information
contained in an analog video raster signal generated by a data processing device and
displayed on a video display terminal connected to the data processing device and for
convening the information contained in the analog video raster signal into a digital
representation of that information for transmission to a remote location comprising:

analog video raster signal input means connected with the data processing device
for receiving said analog video raster signal generated by said data processing device;

conversion means connected to said analog video raster signal input means for
receiving said analog video raster signal and for converting said analog video raster
signal into a digital signal comprising a plurality of digital codes representative of
information contained in said analog video raster signal, said conversion means
comprising processing means for analyzing said analog video raster signal, for
determining an identity of each character displayed on the video display terminal, and for
generating at least one of said plurality of digital codes, said at least one of said plurality
of digital codes being indicative of said identity of said each character displayed on the
video display terminal.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

21. (Original) A computer monitoring system for monitoring information contained in an analog video raster signal generated by a data processing device and displayed on a video display terminal connected to the data processing device and for converting the information contained in the analog video raster signal into a digital representation of that information for transmission to a remote location comprising:

analog video raster signal input means connected with the data processing device for receiving said analog video raster signal generated by said data processing device;

conversion means connected to said analog video raster signal input means for receiving said analog video raster signal and for converting said analog video raster signal into a digital signal comprising a plurality of digital codes representative of information contained in said analog video raster signal, said conversion means comprising processing means for analyzing said analog video raster signal, character determination means for determining an identity of each character displayed on the video display terminal and for generating a digital code indicative of said identity of said each character displayed on the video display terminal and for generating at least one of said plurality of digital codes, said at least one of said plurality of digital codes being indicative of said identity of said each character displayed on the video display terminal; and

training means connected to said character determination means for generating a predetermined character display, for operating said character determination means to generate digital codes representative of an identity of each character in said predetermined character display, and for storing said digital codes generated by said character determination means.

22-122. (Canceled).

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

123. (Previously presented) A computer monitoring system comprising:
 - plural host computer sites, each host computer site having at least one host computer, the at least one host computer including a host processor, a host input device, and a host display device;
 - a remote processor situated at a remote site, the remote processor having a remote display device and a remote input device connected thereto;
 - a network linking the remote site and each of the plural host computer sites, the network facilitating a first connection between a first selected host computer at a first host computer site and the remote site, and during the first connection either:
 - (a) transmitting screen data from the host display device of the first selected host computer to the remote display device, and
 - (b) transmitting input signals from the remote input device to the first selected host computer for controlling the first selected host computer;
 - an on-screen display process, execution of the on-screen display process at the remote site providing a pop-up screen on the remote display device, the pop-up comprising a menu identifying the host computers at the plural host computer sites, the pop-up screen at least overlaying the video appearing on the remote display device as a result of the first connection; whereupon operation of the remote input device in response to the menu of the pop-up screen causes the remote site to terminate the first connection and to establish a second connection between a second selected host computer and the remote site.
124. (Previously presented) The apparatus of claim 123, wherein the second selected host computer is situated at a second host computer site.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

125. (Previously presented) The apparatus of claim 123, wherein at least one of the plural host computer sites comprises a network of host computers.

126. (Previously presented) The apparatus of claim 125, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers.

127. (Previously presented) The apparatus of claim 125, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for each of the host computers the host unit is connected between the host computer and a source of power for the host computer, and wherein upon receipt of the cold boot command from the remote site the host unit temporarily interrupts power to the host processor of the host computer.

128. (Previously presented) The apparatus of claim 125, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for at least one of the host computers the host unit is connected between the host processor and at least one of the host input device and the host display device of the at least one of the host computers.

129-135. (Canceled).

136. (Previously presented) A system for interfacing digitized keyboard signals with a computer processor generating analog video signals, comprising:

a remote access facility;

a non-dedicated serial channel; and

a computer access interface receiving from the remote access facility via the non-dedicated serial channel the digitized keyboard signals and transmitting to the remote

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

access facility via the non-dedicated serial channel a digitized version of the analog video signals, wherein the non-dedicated serial channel is between the remote access facility and the computer access interface.

137. (Previously presented) The system of claim 136, wherein the channel includes a network.

138. (Previously presented) The system of claim 136, wherein the channel includes a wireline.

139. (Previously presented) The system of claim 136, wherein the channel includes a modem-to-modem communication channel.

140. (Previously presented) The system of claim 136, wherein the computer processor includes a computer keyboard port and a computer video device port, the computer access interface including a dedicated link to the keyboard port for transmitting the keyboard signals to the computer processor and including another dedicated link to the video device port for receiving the analog video signals from the computer processor.

141-143. (Canceled).

144. (Previously presented) The system of claim 136, wherein the computer access interface further receives computer keyboard commands from the computer processor and transmits the keyboard commands on the non-dedicated serial channel to the remote access facility.

145. (Previously presented) The system of claim 136, wherein the computer access interface further receives computer mouse commands from the computer processor and transmits the mouse commands on the non-dedicated serial channel to the remote access facility.

146. (Previously presented) The system of claim 136, wherein the computer access interface determines changes in the analog video signals and produces the digitized version of the analog video signals in accordance with the changes.

147. (Previously presented) The system of claim 136, wherein the computer access interface analyzes characteristics of the analog video signals and produces the digitized version of the analog video signals in accordance with results of said analysis of the analog video signal characteristics.

148. (Previously presented) The system of claim 147, wherein the analog video signals include RGB information including RGB components and wherein the computer access interface produces the digitized version of the analog video signals by applying a digitization process to each RGB component of the RGB information.

149. (Previously presented) The system of claim 148, wherein the digitization process includes analyzing phase characteristics of each RGB component.

150. (Previously presented) The system of claim 148, wherein the digitization process includes analyzing amplitude characteristics of each RGB component.

151. (Previously presented) The system of claim 136, wherein the computer access interface includes hardware defining at least a local video port and wherein the computer access interface supports a video pass-thru mode for continuously applying the video signal to the local video port of the computer access interface.

152. (Previously presented) The system of claim 136, wherein the computer processor receives AC power and the computer access interface receives a request to break the AC power and then coordinates a break in the AC power to the computer processor.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

153. (Previously presented) The system of claim 152, further including a power break component receiving the AC power and delivering the AC power to the computer processor, wherein the computer access interface delivers a power break command signal to the power break component upon receipt of the request to break.

154. (Previously presented) The system of claim 136, wherein the computer access interface includes a page alert process generating an outgoing phone call to a predefined page number whenever a remote access user of the remote access facility fails to enter an appropriate access code.

155. (Previously presented) The system of claim 136, wherein the computer access interface generates a predefined audio signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.

156. (Previously presented) The system of claim 136, wherein the computer access interface generates a predefined visual signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.

157. (Previously presented) A system for monitoring a host computer from a remote processor the host computer including a host processor and a host display device port and the remote processor including a remote display device comprising:

a host unit connected between the remote processor and the host computer which (1) causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit and (2) upon receipt of a reset command, causes the host unit to initiate a reset operation of the host computer.

158. (Previously presented) The system of claim 157, wherein the host unit also automatically causes a reset operation whenever a connection between the remote processor and the host unit is terminated.

159. (Previously presented) The system of claim 157, wherein the host unit receives communications from the remote processor via a telephone carrier signal and the host unit includes a carrier detect circuit and automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.

160. (Previously presented) A method of monitoring a computer system comprising:

providing a host unit between a host computer and a remote processor; the host computer including a host processor and a host display device port, the remote processor including a remote display device;

using the host unit to cause screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit; and

receiving a reset command at the host unit and thereupon causing the host unit to initiate a reset operation of the host computer.

161. (Previously presented) The method of claim 160, wherein the host unit also automatically causes a reset operation whenever a connection between the remote processor and the host unit is terminated.

162. (Previously presented) The method of claim 161, further including the steps of receiving communications from the remote processor at the host unit via a telephone carrier signal and wherein the host unit includes a carrier detect circuit and

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.

163-164. (Canceled).

165. (Previously Presented) A system, comprising:

- a user station, comprising:
 - an analog video source generating analog video signals;
 - an analog video port exhibiting the analog video signals;
 - a video display connected to the video port to retrieve from the port the analog video signals and to display the retrieved analog video signals;
 - a video processor to receive, digitize and packetize the analog video signals into packeted digital video signals;
 - a network connector to establish a logical digital data path from the user station to a remote station and to deliver the packeted digital video signals onto the established logical digital data path;
 - a keyboard port for keyboard signals, the network connector also delivering keyboard signals from the remote station to the keyboard port via the established logical digital data path;
 - a mouse port for mouse signals, the network connector also delivering mouse signals from the remote station to the mouse port via the established logical digital data path; and
 - a processor to retrieve the keyboard and mouse signals from the remote station and to instruct the analog video source to generate new analog video signals based on the retrieved keyboard and mouse signals.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

166. (Previously presented) A user station as in claim 165 wherein the network connector includes a modem.

167. (Previously presented) A user station as in claim 165 wherein the network connector includes a router to read addresses on the packeted digital video signals and route the packeted digital video signals along the established logical digital data path based on the addresses.

168. (Previously presented) The system according to claim 165, further comprising:

a plurality of user stations;

the system further comprising:

a remote computer, having:

a data entry device port to receive entry device data entered from a standard keyboard or mouse; and

a video processor to receive, de-digitize and de-packetize the packeted digital video signals back into the analog video signals.

169. (Previously Presented) A system for controlling a target computer from a remote workstation of the type that includes a keyboard, a mouse, and a monitor, comprising:

a host processor and associated video memory and keyboard/mouse buffers;

a video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory;

a keyboard/mouse interface that receives keyboard and mouse signals from the remote workstation and stores them in the keyboard/mouse buffers; and

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

the host processor operating a remote access and control program that transmits the contents of the video memory to the remote workstation and receives the contents of the keyboard/mouse buffers from the target computer, both over a communication link.

170. (Previously Presented) The system of claim 169, wherein the host computer receives the keyboard and mouse signals from the remote workstation, stores the received keyboard and mouse signals in the buffers and forwards the contents of the keyboard/mouse buffers to a keyboard and mouse input on the target computer.

171. (Canceled).

172. (Previously presented) The system of claim 169, wherein the communication link is a telephone line.

173. (Previously presented) The system of claim 169, wherein the communication link is a logical data path.

174. (Previously presented) The system of claim 169, wherein the communication link is a network.

175. (Previously presented) The system of claim 169, wherein the video digitizer includes a phase lock loop that produces a clocking signal having a frequency substantially equal to the time at which pixel values are transmitted in the video signal and a gating counter that passes the clocking signal to an analog to digital converter that samples the video signal during an active video portion of the video signal.

176. (Previously presented) The system of claim 169, wherein the video digitizer alternatively samples a single color video signal in a frame of video data and stores the samples in the video memory.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

177. (Previously presented) A video digitizer for receiving analog video signals at a plurality of resolutions and for storing the video signals in a video memory of a host computer comprising:

a synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal;

a microprocessor that determines a clocking rate at which the analog video signal should be sampled from the timing of the vertical and horizontal synchronize signals;

a clock signal generator that produces a clock signal at the clocking rate;

an analog to digital converter that is controlled by the clock signal to sample the analog video signal, and

a bus interface circuit that writes the samples of the analog video signal into the video memory of the host computer.

178. (Previously presented) The video digitizer of claim 177, wherein the clock signal generator comprises:

a phase lock loop circuit that compares the phase of the horizontal synchronize signal with the phase of a divided clocking signal;

a variable oscillator that produces the clocking signal that controls the analog to digital converter, wherein the clocking signal has a frequency that is dependent on the difference in phase between the horizontal synchronize signal and the divided clocking signal; and

a programmable divider that receives the clocking signal produced by the variable oscillator and produces the divided clocking signal that is fed to the phase lock loop circuit.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

179. (Previously presented) The video digitizer of claim 178, further comprising a gating circuit that receives the clocking signal and passes the clocking signal to the analog to digital converter during an active video portion of the analog video portion of the analog video signal.

180. (Previously presented) The video digitizer of claim 178, further comprising a phase adjust circuit that adjusts the phase of the clocking signal.

181. (Previously presented) The video digitizer of claim 177, further comprising a selection circuit that alternatively selects a red, green, and blue component on the analog video signal to be sampled by the analog to digital converter.

182. (Previously presented) The video digitizer of claim 177, wherein the analog to digital converter includes separate analog to digital converters to sample the red, green, and blue components of the analog video signal.

183. (Previously presented) The video digitizer of claim 177, wherein the host computer operates a remote access and control program that transmits the contents of the video memory to a remote computer system.

184-185. (Canceled).

186. (Previously Presented) A system for interfacing keyboard signals with a selected computer processor generating video signals, comprising:

an on-screen display generator to create a menu for a monitor associated with the keyboard signals, said menu listing the selected computer processor among a plurality of other computer processors for selection by a user of the monitor;

a network access device to interface with a network including the plurality of computer processors and the selected computer processor;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a video interface to receive information indicative of the video signals from the network via the network access device;

a keyboard interface to read the keyboard signals and to deliver the keyboard signals to the selected computer processor via the network and the network access device.

187. (Previously presented) A system according to claim 186, also for interfacing mouse signals with the selected computer processor, further comprising:

a mouse interface to read the mouse signals and to deliver the mouse signals to the selected computer processor via from the network and the network access device.

188. (Previously presented) A system according to claim 186, wherein:
the keyboard interface communicates with the selected computer processor through a keyboard port of the selected computer processor.

189. (Previously presented) A system according to claim 187, wherein:
the mouse interface communicates with the selected computer processor through a mouse port of the selected computer processor.

190-192. (Canceled).

193. (Previously Presented) A system, comprising:
a hardware host unit coupled to a host computer different from the hardware host unit; and

a remote computer software utility, located at a remote site computer, comprising:
a connection utility to establish a communication session with the host unit over a communication link; and

a pop up menu utility providing at least a user choice at the remote site computer to obtain access to the host computer via the communication utility.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

194. (Previously presented) A computer monitoring system for monitoring the information displayed on a video display terminal connected to, and receiving display information from, a data processing device comprising:

a microprocessor controlled computer hardware device working even if the data processing device is locked up and no longer processing data or input commands, wherein the microprocessor controlled computer hardware device includes a video raster signal input circuit for receiving a video raster signal representative of the information displayed on the video display terminal from the data processing device and a converter communicating with the video raster signal input circuit to convert the video raster signal into a digital signal representative of the information contained in the video raster signal.

195. (Previously presented) The system according to claim 194, wherein said converter comprises a character determiner for determining the identity of each character displayed on the video display terminal and for generating a digital code indicative of the identity of said each character displayed on the video display terminal, and

wherein said character determiner comprises circuitry for generating a series of cyclic redundancy checks, wherein each said cyclic redundancy check is generated from the pixel information associated with each character location on the video display terminal.

196. (Previously presented) The system according to claim 195, further comprising a transmitter coupled to said converter for transmitting said digital code to a remote location.

197. (Previously presented) The system according to claim 196, further comprising:

a receiver at said remote location coupled to said transmitter for receiving said digital codes transmitted by said transmitter; and

a remote video display coupled to said receiver for displaying said digital codes received from said receiver, said display showing an image sufficiently similar to that shown on the video display terminal to allow a user to determine the operational status of the data processing device.

198. (Previously Presented) The system according to claim 195, wherein said digital codes are transmitted to said remote location in response to a command received from said remote location requesting that said digital codes be transmitted.

199. (Previously presented) The system according to claim 195, further comprising a network for interconnecting a plurality of said microprocessor controlled computer hardware devices with one another and for allowing a user at said remote location to selectively access any one of said microprocessor controlled computer hardware devices or its associated data processing device.

200. (Previously presented) The system according to claim 195, further comprising:

a memory connected with said converter for storing said digital codes to retain an image of the information displayed on the video display terminal; and

a controller coupled to said memory and said converter for monitoring changes to said image and for storing said digital codes representative of said changes in said memory, whereby said memory contains a series of image frames that can be used by an operator to determine the cause of a system failure.

201. (Previously presented) The system according to claim 195, further comprising:

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a trainer coupled to said character determiner for generating a predetermined character display and for storing said digital codes generated by said character determiner representative of each character on said predetermined display; and

a comparator communicating with said trainer and said character determiner for comparing said digital codes generated for an unknown display on said video display terminal with said digital codes representative of each character on said predetermined display, whereby the identity of each character displayed on said unknown display can be determined.

202. (Previously presented) The system according to claim 195, further comprising a synchronization signal input circuit for receiving from the data processing device a horizontal synchronization signal, and a pixel clock generator connected with said synchronization signal input circuit and said converter for generating a pixel clock signal,

wherein said data processing device is a personal computer, and said video raster signal input circuit comprises a circuit interconnected between said personal computer and the video display terminal.

203. (Previously presented) The system according to claim 195, wherein the data processing device is a personal computer, wherein the video raster signal input circuit is coupled to said personal computer for receiving a video raster signal and a horizontal synchronization signal from said personal computer, and wherein the system further comprises:

a video signal output circuit coupled to said video display terminal and said video signal input circuit for supplying said video raster signal and said horizontal synchronization signal to said video display terminal;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a host site command input circuit located with said personal computer for receiving commands from a host site user to be processed by said personal computer;

a command output circuit coupled to said local command input circuit and with a standard keyboard interface of said personal computer for supplying commands to be processed by said personal computer to said standard keyboard interface of said personal computer;

a transmitter coupled to said converter and said command output circuit for transmitting said digital signal to a remote location and for transmitting commands received from said remote location to said command output circuit;

a remote command input circuit at said remote location coupled to said transmitter for receiving commands to be transmitted to and executed by said personal computer; and

a remote video display for receiving said digital signals representative of the information contained in said video raster signal and for displaying said signals to allow a user at said remote location to view the information displayed on said video display terminal coupled to said personal computer,

wherein the converter comprises a pixel clock generator for generating a pixel clock signal;

whereby computer service personnel at the remote location can determine the present operating status of the file server, determine repair action to be taken if necessary, and initiate said repair action by transmitting commands to be executed by said personal computer to said personal computer.

204. (Previously presented) A method of converting the information contained in a video raster signal generated by a data processing device and displayed on a video

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

display terminal associated with the data processing device, into a digital representation of that information for monitoring the information, the method comprising:

receiving the video raster signal; and

converting the video raster signal into a digital signal representative of the information contained in the video raster signal independently from the data processing device.

205. (Previously presented) The method according to claim 204, wherein said converting step includes the steps of determining the identity of each character displayed on the video display terminal and generating a digital code indicative of the identity of said each character displayed on the video display terminal, wherein said step of generating a digital code comprises the step of generating a series of cyclic redundancy checks from the pixel information associated with each character location on the video display terminal.

206. (Previously presented) The method according to claim 205, further comprising the step of transmitting said digital codes to a remote location.

207. (Previously presented) The method according to claim 206, further comprising the steps of:

receiving said digital codes transmitted to said remote location; and

displaying said digital codes received from said remote location to create an image sufficiently similar to that shown on the video display terminal to allow a user to determine the operational status of the data processing device.

208. (Previously presented) The method according to claim 205, wherein said step of transmitting said digital codes to said remote location is performed in response to

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a command received from said remote location requesting that said digital codes be transmitted.

209. (Previously presented) The method according to claim 205, further comprising the steps of:

analyzing a predetermined character sequence displayed on the video display terminal to determine the identity of each character displayed on said video display terminal;

generating a digital code representative of each character in said character sequence displayed on said video display terminal; and

storing said digital codes in a memory, whereby future unknown screen displays can be compared with said digital codes to determine the identity of characters displayed on said future unknown screen displays.

210. (Previously presented) The method according to claim 204, further comprising the steps of:

receiving a horizontal synchronization signal from the data processing device; and generating a pixel clock signal in synchronization with said horizontal synchronization signal, wherein said data processing device is a personal computer, and said video raster signal is intercepted between said personal computer and the video display terminal.

211. (Previously Presented) A circuit module for a computer having in operation therein a remote access engine to communicate between a host server and a remote workstation, comprising:

a main CPU to coordinate a digital to analog conversion of host video signals from the host server;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

- a field programmable gate array, in communication with the main CPU;
- a video interface circuit, in communication with the field programmable gate array, to capture the host video signals for the main CPU and field programmable gate array;
- a video RAM to store host video signals digitized by the main CPU and field programmable gate array, and to deliver the digitized video signals to the remote access engine for delivery to the remote computer, the video RAM in communication with the field programmable gate array to receive at least video sync processing from the field programmable gate array;
- at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer;
- a bus controller, in communication with the field programmable gate array, to communicate information identifying the digitized host video signals and the mouse and keyboard information to the remote access engine.

212. (Previously presented) A remote access system communicating with a digital network transmission medium to communicate user input signals from a remote computer to a host computer via the transmission medium and video signals from the host computer to the remote computer via the transmission medium, comprising:

- a user input process to capture the user input signals for digital transmission to the host computer;
- a video process to capture the video [input] signals, digitize them and format them for transmission to the remote computer, even when the host computer has locked up to no longer accept any user input signals;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a standard remote access engine;

to communicate the user input signals on the transmission medium between the host and remote computers, and

to communicate the video signals, in digital format, on the transmission medium between the host and remote computers, even when the host computer has locked up to no longer accept any user input signals.

213. (Previously presented) A circuit module for a computer having in operation therein a remote access engine to communicate between a host server and a remote workstation, including:

video buffer circuits to receive, respectively, red, green and blue analog video signals from the host server;

sync polarity circuits to receive, respectively, horizontal and vertical sync signals from the host server;

analog to digital converters communicating with the video buffer circuits to receive the red, green and blue analog video signals and convert them to digital video signals;

a phase locked loop video dot clock circuit communicating with the sync polarity circuits and outputting a dot clock signal;

a TTL converter receiving the digital video signals and converting them to a TTL format; and

a video processing circuit, including a cpu and a programmable gate array, connected to the sync polarity circuits, the phase locked loop video dot clock circuit, and the TTL converter to automatically determine a graphics mode of the red, green and blue analog video signals.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

214. (Previously presented) A circuit module according to claim 213, wherein the programmable gate array includes circuitry to determine a video frame rate characteristic of the red, green and blue analog video signals.

215. (Previously presented) A circuit module according to claim 213, wherein the graphics mode includes a number of available colors.

216. (Previously presented) A circuit module according to claim 213, wherein the graphics mode includes a screen resolution in horizontal pixels per screen by vertical pixels per screen.

217. (Previously presented) A circuit module according to claim 213, wherein the graphics mode includes a table characterizing a number of available colors versus a screen resolution in horizontal pixels per screen by vertical pixels per screen.

218. (Previously presented) A circuit module according to claim 213, wherein the video processing circuit includes memory to store a set of predefined video graphics mode characteristics, and wherein the video processing circuit further divides the red, green and blue analog video signals into one or more video screen segment parts and compares the video screen segment parts to the stored predefined video graphics mode characteristics.

219. (Previously presented) A circuit module according to claim 218, wherein the video processing circuit includes a video checksum manager for storing and managing checksums associated with each video screen segment part.

220. (Previously Presented) A computer having a virtual path communication link with a remote computer over a network medium, comprising:

a remote access engine;

a data bus;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a set of circuit modules in communication with a set of corresponding host computers to receive analog video signals from the corresponding host computers, to digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus;

a communication port establishing a network connection via the network medium between the remote access engine and a selected one of said set of circuit modules to receive the digitized and synchronized video signals and to deliver the selected digitized video signals to the remote computer for display.

221. (Previously Presented) A computer according to claim 220, wherein:
- each circuit module includes:
 - a main CPU to coordinate a digital to analog conversion of host video signals from a corresponding host computer;
 - a field programmable gate array, in communication with the main CPU;
 - a video interface circuit, in communication with the field programmable gate array, to capture the host video signals for the main CPU and field programmable gate array;
 - a video RAM to store host video signals digitized by the main CPU and field programmable gate array, and to deliver the digitized video signals to the remote access engine for delivery to the remote computer, the video RAM in communication with the field programmable gate array to receive at least video sync processing from the field programmable gate array;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer;

a bus controller, in communication with the field programmable gate array, to communicate information identifying the digitized host video signals and the mouse and keyboard information to the remote access engine.

222. (Previously presented) A remote access device to remotely control a host computer and to receive at a remote location a video signal from the host computer, comprising:

a remote access engine between the host computer and the remote location to coordinate delivery of data packets along a telecommunications link between the host computer and the remote location; and

a remote access controller, including a remote access control card communicating with the telecommunications link, to read a present caller ID associated with the remote location, to store a list of predefined caller IDs, to compare the present caller ID with the list and to disable the remote access engine whenever the present caller ID fails to match any from the list of predefined caller IDs.

223. (Previously presented) A remote access device according to claim 222, wherein the remote access controller further includes a telephone jack to automatically issue a page alert to a predefined telephone number whenever the present caller ID fails to match any from the list of predefined caller IDs.

224. (Previously presented) A remote access device according to claim 222, wherein the remote access controller further resets the host computer wherever the predefined caller ID matches the present caller ID.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

225. (Previously presented) A remote access device according to claim 222, wherein the remote access controller further reboots the host computer wherever the predefined caller ID matches the present caller ID.

226. (Previously presented) A remote access device according to claim 222, further including an external modem and a control module providing AC power to the host computer, the external modem communicating with the control module and automatically answering calls received by the external modem on a different telecommunications link, said control module temporarily interrupting power to the host computer whenever said external modem automatically answers a call.

227.-238 (Canceled after being allowed in 10/425,717)

239. (Previously presented) A circuit for communicating RGB video information from a Host computer to a remote computer via a network link, comprising:
video input circuitry to receive the RGB video information from the Host computer;

video processing circuitry to digitize the RGB video information and to decode a video format of the RGB video information received by the video input circuitry; and

a flash palette converter circuit, including:

an address mux receiving the digitized RGB video information as a stream of digital RGB pixel data;

a flash palette converter RAM being addressed by the stream of digital RGB pixel data and outputting for each RGB pixel a palette index byte corresponding to a color value of said RGB pixel.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

240. (Previously presented) A circuit according to claim 239, further including a pixel assembly circuit to condense a number of palette index bytes into a single assembled pixel byte for storage, including:

a logic array receiving the video format of the RGB video information from the video processing circuitry and receiving the palette index byte from the flash palette converter circuit; and

a set of flip-flops controlled by the logic array to assemble the number of palette index bytes as a function of a characteristic of the video format of the RGB video information.

241. (Previously presented) A remote access PC to facilitate communications between a host computer and a remote computer distantly located relative to each other, comprising:

a remote access process to establish a logical data path between the host computer and the remote computer;

a control module having an AC power input to receive AC power from an external power source, an AC power output to deliver the AC power from the external power source to the host computer, a switch therebetween, and a control data input to receive a reboot signal and thereupon interrupt AC power to the host computer by operation of the switch;

a communication circuit establishing a different logical data path between the remote computer and the communication circuit, the communication circuit delivering the reboot signal to the control module when commanded to do so by the remote computer via the different logical data path.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

242. (Previously presented) A remote access PC according to claim 241, wherein the communication circuit is a modem.

243. (Previously presented) A remote access device for communicating real time video signals from a host PC to a remote PC and for communicating mouse signals entered in response to the real time video signals from the remote PC to the host PC, comprising:

a video process to capture and digitize the video signals from the host PC including video signals indicating a position of a mouse pointer on a monitor associated with the host PC, the position of said mouse pointer identified by the video process being delayed by a period associated with the capturing and digitizing steps;

a mouse synchronizer to capture a current mouse position of the mouse pointer on the monitor associated with the remote PC;

a video application to communicate the current mouse position of the mouse pointer on the monitor associated with the remote PC to the host PC whereupon the host PC jumps the host mouse pointer to a position coincident with the current mouse position.

244. (Previously presented) A remote access device according to claim 243, wherein the current mouse position is communicated from the remote computer to the mouse synchronizer in the form of current X/Y coordinates of the remote computer mouse pointer.

245. (Previously presented) A remote access device according to claim 243, wherein the mouse synchronizer captures the current mouse position of the mouse pointer on the monitor associated with the remote PC whenever a remote user clicks a mouse button.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

246. (Previously presented) A remote access interface between a remote workstation having an associated remote monitor and a host device having an associated host monitor, comprising:

- a host mouse;
- a video capture circuit to intercept analog video signals from the host device and applying the analog video signals to the host monitor such that the host monitor displays a host pointer associated with the host mouse;
- a mouse capture circuit to capture remote mouse signals from the remote workstation over a telecommunication path and to transmit the remote mouse signals to the host device for further processing as though the remote mouse signals were received from the host mouse;
- a mouse adjustment process to cause the host pointer on the host monitor to jump to a position determined by the remote mouse signals.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

(ix). EVIDENCE APPENDIX

The Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed May 11, 2009 is relied upon herein. As described in the Response filed May 11, 2009:

the McAlexander Declaration shows that all rejections under appeal should be overcome. The McAlexander Declaration addresses the prior art rejections that were made for the first time in the September 12, 2008 office action. Thus, applicants could not have presented this declaration earlier. The McAlexander Declaration is necessary to provide evidentiary weight from a technical expert beyond applicants' assertions about the prior art and its application to the pending claims.

Thus, the Declaration was in compliance with 41.33(d)(1). In addition, the Advisory Action dated June 23, 2009 did not indicate whether the Declaration was or was not relied upon. Accordingly, since it has not been denied entry, it is assumed that the Declaration was entered and considered by at least June 23, 2009.

The Declaration of Joseph C. McAlexander, III Under 37 C.F.R. § 1.132 filed November 1, 2005 also is relied upon herein. That Declaration was considered as part of the Amendment filed November 1, 2005 after which an action was subsequently issued on September 12, 2008 withdrawing the grounds for rejection that were the subject of the Declaration.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT Application of: Confirmation No.: 6319
PERHOLTZ, Ronald J. Attorney Docket: 2540-0550
Appl. S.N.: 10/032,325 Group Art Unit: 2145
Filing Date: March 4, 2002 Examiner: SWEARINGEN, Jeffrey
SYSTEM AND METHOD FOR REMOTE
Title: **MONITORING AND OPERATION OF**
PERSONAL COMPUTERS Date: May 7, 2009

DECLARATION OF JOSEPH C. MCALXANDER, III UNDER 37 C.F.R. § 1.132

I, Joseph C. McAlexander, III, hereby declare as follows:

I have been asked by counsel for the assignee of the above-referenced application to provide my analysis and opinions regarding certain matters raised by the September 12, 2008 Office Action. Specifically, I have been asked to analyze and to respond to the rejections of the pending claims raised in that Office Action. I am being compensated on an hourly basis for my work in connection with this declaration.

I. QUALIFICATIONS

I am a Registered Professional Engineer and hold a Bachelor of Science degree in Electrical Engineering from North Carolina State University. I have been associated with the electronics and integrated circuit industries as a designer and consultant for the last 36 years and have been awarded twenty-five U.S. Patents and a number of foreign patents for my contributions. A more detailed account of my work experience and other qualifications is listed in my Curriculum Vitae attached as Exhibit 1.

II. BASIS OF OPINIONS FORMED

In preparing this declaration, I have reviewed and considered U.S. Patent No. 5,732,212 ("the '212 patent") which is the basis of the present reissue application, the September 12, 2008 Office Action, including the references applied in the office action. I have also relied on my education, experience, and knowledge of basic engineering practices in the industry as well as my understanding of the applicable legal principles describe below. My opinions are based in part on study of those documents, materials, knowledge and experience.

III. LEVEL OF ORDINARY SKILL IN THE ART

I understand that factors such as the education level of those working the field, the sophistication of the technology, the types of problems encountered in the art, prior art solutions to those problems, and the speed at which innovations are made may establish the level of skill in the art. In my opinion, a person of ordinary skill in the art at the time the present invention was made would have a bachelors degree in electrical engineering, or the equivalent education, with about 5 years of technical experience in component design or integration of components into systems relating to the transmission, reception, coding/decoding, formatting/reformatting of computer signals.

IV. APPLICABLE LEGAL STANDARDS

I understand that for a claim to be anticipated by a prior art reference, every element and limitation of the claim must be contained, either expressly or inherently, in a single prior art reference. I understand that for a reference to inherently disclose an element, it must be necessarily true that the reference included that element or functions in accordance with the

claim element. I further understand that for a prior art reference to anticipate, the prior art reference must enable one skilled in the art to practice the claimed invention.

I also understand that a claimed invention is unpatentable under 35 U.S.C. §103 as being obvious if the differences between the invention and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Obviousness, as I understand, is based on the scope and content of the prior art, the differences between the prior art and the claim, the level of ordinary skill in the art and secondary indicia of obviousness to the extent they exist. Secondary indicia of obviousness may include, for example: a long felt but unmet need in the prior art that was satisfied by the invention of the patent; commercial success or lack of commercial success of processes covered by the patent; unexpected results achieved by the invention; praise of the invention by others skilled in the art; taking of licenses under the patent by others; deliberate copying of the invention; and contemporaneous and independent invention by others. I also understand that there must be a nexus between any such secondary indicia and the invention. In forming my opinions on obviousness grounds, I considered the above secondary indicia to the extent that such evidence is apparent from the prior art.

V. OPINIONS REGARDING REJECTION OF PENDING CLAIMS

As an initial matter, I understand that certain claims pending in the '325 application are being amended concurrently with the filing of this declaration. I have quoted and used the claim language as amended in providing my opinions regarding the rejections. My conclusions with respect to the rejections remain the same regardless of whether the amended or unamended versions of the claims are analyzed. In my analysis, I have used the broadest reasonable meaning

of the claim terms consistent with the specification and the knowledge of those of ordinary skill in the art at the time of the inventions.

A. Rejection of Claims 136-139 and 144 under 35 U.S.C. § 102(b) as being Anticipated by Sheets (US 4,513,373)

The Office Action rejects claims 136-139 and 144 under 35 U.S.C. § 102(b) as being anticipated by Sheets (US 4,513,373). I find that the cited portions of Sheets do not disclose the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. Claim 136

Claim 136 recites:

136. A system for interfacing digitized keyboard signals with a computer processor generating analog video signals, comprising:

a remote access facility;

a non-dedicated serial channel; and

a computer access interface receiving from the remote access facility via the non-dedicated serial channel the digitized keyboard signals and transmitting to the remote access facility via the non-dedicated serial channel a digitized version of the analog video signals, wherein the non-dedicated serial channel is between the remote access facility and the computer access interface.

Claim 136 recites a “system for interfacing digitized keyboard signals with a computer processor generating analog video signals.” The system includes “a remote access facility,” “a non-dedicated serial channel,” and “a computer access interface.” The “computer access interface” receives “the digitized keyboard signals” “from the remote access facility via the non-dedicated serial channel,” and transmits “to the remote access facility via the non-dedicated serial channel a digitized version of the analog video signals” generated by the “computer

processor.” Claims 136 states that “the non-dedicated serial channel is between the remote access facility and the computer access interface.”

The Office Action has not clearly identified the portions of Sheets that allegedly disclose the elements of claim 136. Thus, the Office Action has failed to identify substantial evidence supporting the assertion that Sheets renders claim 136 unpatentable for anticipation.

For example, for the claimed “remote access facility” and the “non-dedicated serial channel,” the Office Action points to column 2, lines 3-25 of Sheets. That portion of Sheets describes port selector 12 and stations and terminals 14, 16, 18, and 20. There is no indication in the Office Action as to which station and terminal allegedly is the “remote access facility” and what is the “non-dedicated serial channel.” Presumably, the port selector 12 allegedly corresponds with the “non-dedicated serial channel” and one of the stations/terminals 14, 16, 18, and 20 allegedly corresponds to the “remote access facility.” The Office Action identifies Sheets’ ASCII terminals 22 and 24 as allegedly describing the claimed “computer access interface.” (Office Action, pp. 2-3). Thus, according to the Office Action, all elements of claim 136 are disclosed by Sheets’ port selector 12 or the stations/terminals 14, 16, 18, 20, 22, and 24.

At the very least, the cited portions of Sheets do not disclose “a computer access interface ... transmitting ... a digitized version of the analog video signals.” The office action cites column 2, lines 26-30 for the alleged disclosure of the “computer access interface.” (Office Action, pp. 2-3). But that portion of Sheets simply describes ASCII terminals 22 and 24 and states that they may be VT100 “dumb” terminals. ASCII terminals receive and transmit ASCII symbols. According to Sheets, “[t]he stations 14 and 16, along with the terminals 18, 20, 22 and 24, each utilizes the ASCII communication format for data communication.” (Sheets, col. 2, lines 31-33). They do not generate or transmit analog video signals or a digitized version of

analog video signals. The cited portion of Sheets makes no mention of a “computer processor” that generates “analog video signals.” The cited portion of Sheets also does not mention “analog video signals” or “a digitized version of the analog video signals.” The Office Action entirely fails to identify any evidence (much less substantial evidence) that Sheets discloses these elements of claim 136.

Moreover, the preamble expressly recites “a computer processor generating analog video signals.” The office action does not cite to any portion of Sheets for a disclosure of this claim language. (Office Action, pp. 2-3). Thus, the rejection of claim 136 is deficient for this additional reason.

Claim 136 is patentable for at least the reasons identified above.

2. Claim 137

Claim 137 recites the system of claim 136 “wherein the channel includes a network.”

Claim 137 is patentable for at least the reasons identified above for claim 136.

3. Claim 138

Claim 138 recites the system of claim 136 “wherein the channel includes a wireline.” The Office Action identifies column 2, lines 56-65, as allegedly disclosing the claimed “channel.” But column 2, lines 56-65, describes converters 30, 32, 34, and 36, modem sharing device 38, modems 40 and 44, and communication link 42. None of these elements satisfy the language of claim 136 that requires the “non-dedicated serial channel” to be “between the remote access facility and the computer access interface.”

For claim 136, the Office Action identified the terminals/stations 14, 16, 18, and 20 as the “remote access facility” and the terminals 22 and 24 as allegedly corresponding to the “computer access interface.” The converters, modem sharing device, modems and communication link now

identified for claim 138 is not “between the remote access facility and the computer access interface.” Instead, these structures are between the computer 52 and the port selector 12. Thus, the Office Action has failed to identify substantial evidence that the cited portion of Sheets discloses the “channel” recited in claim 138.

Claim 138 is patentable for at least the reasons identified above.

4. Claim 139

Claim 139 recites the system of claim 136 “wherein the channel includes a modem-to-modem communication channel.” The Office Action identifies column 2, lines 56-65, as allegedly disclosing the claimed “channel.” But column 2, lines 56-65, describes converters 30, 32, 34, and 36, modem sharing device 38, modems 40 and 44, and communication link 42. None of these elements satisfy the language of claim 136 that requires the “non-dedicated serial channel” to be “between the remote access facility and the computer access interface.”

For claim 136, the Office Action identified the terminals/stations 14, 16, 18, and 20 as the “remote access facility” and the terminals 22 and 24 as allegedly corresponding to the “computer access interface.” The converters, modem sharing device, modems and communication link now identified for claim 138 is not “between the remote access facility and the computer access interface.” Instead, these structures are between the computer 52 and the port selector 12. Thus, the Office Action has failed to identify substantial evidence that the cited portion of Sheets discloses the “channel” recited in claim 139.

Claim 139 is patentable for at least the reasons identified above.

5. Claim 144

Claim 144 recites the system of claim 136 “wherein the computer access interface further receives computer keyboard commands from the computer processor and transmits the keyboard

commands on the non-dedicated serial channel to the remote access facility.” For claim 144, the Office Action merely states that the subject matter of claim 144 “is the dumb terminal in Sheets” and cites to column 2, lines 26-30, and column 3, line 61-column 4, line 3. The “dumb terminals” identified by Sheets are VT100 terminals. (Sheets, col. 2, lines 26-30).

Claim 144 is patentable for at least the reasons identified above, including the discussion of the dumb terminals in Claim 136.

B. Rejection of Claim 246 under 35 U.S.C. § 102(b) as being Anticipated by Moore (US 4,816,810)

The Office Action cites Moore, US 5,287,461, as allegedly anticipating claim 193 under 35 U.S.C. § 102(b). I find that the cited portions of Moore do not disclose the elements of the claim 246 for at least the reasons provided below. Thus, I conclude that the rejection is incorrect.

Claim 246 recites:

246. A remote access interface between a remote workstation having an associated remote monitor and a host device having an associated host monitor, comprising:
 - a host mouse;
 - a video capture circuit to intercept analog video signals from the host device and applying the analog video signals to the host monitor such that the host monitor displays a host pointer associated with the host mouse;
 - a mouse capture circuit to capture remote mouse signals from the remote workstation over a telecommunication path and to transmit the remote mouse signals to the host device for further processing as though the remote mouse signals were received from the host mouse;
 - a mouse adjustment process to cause the host pointer on the host monitor to jump to a position determined by the remote mouse signals.

The Office Action cites Moore, US 4,816,810, as allegedly anticipating claim 246. This rejection should be reversed. Moore '810 has virtually nothing to do with the subject matter recited in claim 246. Moore '810 describes a typical computer mouse coupled to a local computer with the addition of a second "acceptance" button for the mouse added so that the mouse does not move when the user intends to press the mouse button. (Moore '810, col. 1, line 44-col. 2, line 2). Moore '810 simply splices remote acceptance switch 54 into two of the mouse wires to allow separate actuation of the mouse button. (Moore '810, Figure 3).

Claim 246, on the other hand, describes a "remote access interface" between a "remote workstation" having a monitor, and a "host device" having an associated monitor. The "remote access interface" includes "a host mouse," a "video capture circuit," a "mouse capture circuit," and a "mouse adjustment process." The "video capture circuit," the "mouse capture circuit," and the "mouse adjustment process" each have additional limitations required by the claim. For example, the "video capture circuit" is disposed "to intercept analog video signals from the host device and to apply the analog video signals to the host monitor such that the host monitor displays a host pointer associated with the host mouse." The "mouse capture circuit" is disposed "to capture remote mouse signals from the remote workstation over a telecommunication path and to transmit the remote mouse signals to the host device for further processing as though the remote mouse signals were received from the host mouse." Finally, the "mouse adjustment process" is disposed "to cause the host pointer on the host monitor to jump to a position determined by the remote mouse signals."

The Office Action has identified no portions of Moore '810 that disclose the claimed "video capture circuit," the "mouse capture circuit," or the "mouse adjustment process." The only portions of Moore '810 identified in the Office Action describe a typical mouse or the

remote acceptance switch. Nothing else is identified. Thus, the Office Action has failed to identify substantial evidence that Moore '810 anticipates claim 246.

Claim 236 is patentable for at least the reasons identified above.

C. Rejection of Claims 165-168, 186-190, 211, 212, 220-221, and 243-246 under 35 U.S.C. § 102(b) as being Anticipated by Rhyne (US 4,901,223)

The Office Action cites Rhyne, US 4,901,223, as allegedly anticipating claims 165-168, 186-190, 211, 212, 220-221, and 243-246 under 35 U.S.C. § 102(b). I find that the cited portions of Rhyne do not disclose the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. Claims 165-167

Independent claim 165 recites:

165. A system, comprising:

a user station, comprising:

analog video source generating analog video signals;

analog video port exhibiting the analog video signals;

a video display connected to the video port to retrieve from the port the analog video signals and to display the retrieved analog video signals;

a video processor to receive, digitize and packetize the analog video signals into packeted digital video signals;

a network connector to establish a logical digital data path from the user station to a remote station and to deliver the packeted digital video signals onto the established logical digital data path;

a keyboard port for keyboard signals, the network connector also delivering keyboard signals from the remote station to the keyboard port via the established logical digital data path;

- a mouse port for mouse signals, the network connector also delivering mouse signals from the remote station to the mouse port via the established logical digital data path; and
- a processor to retrieve the keyboard and mouse signals from the remote station and to instruct the analog video source to generate new analog video signals based on the retrieved keyboard and mouse signals.

Dependent claims 166 and 167 recite, respectively,

166. A user station as in claim 165 wherein the network connector includes a modem.

167. A user station as in claim 165 wherein the network connector includes a router to read addresses on the packeted digital video signals and route the packeted digital video signals along the established logical digital data path based on the addresses.

With respect to claim 165, the Office Action identifies Rhyne's workstation 16 as allegedly corresponding to the claimed "user station," and Rhyne's host computer 10 as allegedly corresponding to the claimed "remote station." (Office Action, p. 4). There are several aspects of claim 165 that are not disclosed by the cited portions of Rhyne.

The claimed "user station" includes "a video processor to receive, digitize and packetize the analog video signals into packeted digital video signals." The Office Action cites column 8, lines 5-16, of Rhyne for this claim feature. But that portion of Rhyne describes the application protocol running on the workstation 16, and that it sends parameters to the application program in the host computer 10 or commands to the display service 50 (or both) upon entry of keyboard or mouse input. There is no mention of a processor in workstation 16 that receives, digitizes and packetizes analog video signals from the analog video source. This entire element of claim 165 is entirely missing from the cited portions of Rhyne.

Claim 165 also recites a "network connector ... to deliver the packeted digital video signals onto the established logical digital data path." The Office Action identifies a portion of

Rhyne merely describing the communication service 24 that establishes paths between the host computer 10 and a workstation. The cited portion of Rhyne does not disclose a “network connector” that “deliver[s] the packeted digital video signals onto the established logical digital data path.” In the cited portions of Rhyne, there is no packeted digital video signals to be passed from the workstation (*i.e.*, the alleged “user station”) to the host computer (*i.e.*, the alleged “remote station”).

The cited portion of Rhyne does not disclose “a keyboard port for keyboard signals, the network connector also delivering keyboard signals from the remote station to the keyboard port via the established logical digital data path.” The Office Action identifies Rhyne’s patent at column 8, lines 61-63. But the cited portion of Rhyne relates to the input of commands entered at the workstation (*i.e.*, the alleged “user station”). (Rhyne, col. 8:61-63). There is no disclosure of a “network connector also delivering keyboard signals from the remote station to the keyboard port” of the user station. Indeed, keyboard signals are not sent from the host computer (*i.e.*, the alleged “remote station”) to the workstation 16 (*i.e.*, the alleged “user station”).

Similarly, the cited portion of Rhyne does not disclose “a mouse port for mouse signals, the network connector also delivering mouse signals from the remote station to the mouse port via the established logical digital data path.” Col. 9, lines 27-42, cited in the Office Action merely describe the operation of the application protocol that runs on workstation 16. It does not describe the delivery of any signals, much less mouse signals, from the host computer (*i.e.*, the alleged “remote station”) to the workstation 16 (*i.e.*, the alleged “user station”).

Finally, col. 10:31-67 of Rhyne does not disclose “a processor to retrieve the keyboard and mouse signals from the remote station and to instruct the analog video source to generate new analog video signals based on the retrieved keyboard and mouse signals.” According to the

Office Action, the claimed “remote station” allegedly corresponds to Rhyne’s host computer. Rhyne does not disclose the entry of keyboard or mouse signals at the “remote station.” Thus, there cannot be a “processor to retrieve the keyboard and mouse signals from the remote station” and “instruct the analog video source [alleged to be in Rhyne’s workstation 16] to generate new video signals based on the retrieved keyboard and mouse signals.” The video signals displayed at workstation 16 are not based on keyboard or mouse signals from the host computer (i.e., the alleged “remote station”).

Dependent claims 166-167 are patentable for at least each of the reasons described above for claim 165. Thus, the anticipation rejections of claims 165-167 should be withdrawn for each of the above reasons.

2. Claim 168

Dependent claim 168 recites:

168. The system according to claim 165, further comprising:
 - a plurality of user stations;
 - the system further comprising:
 - a remote computer, having:
 - a data entry device port to receive entry device data entered from a standard keyboard or mouse; and
 - a video processor to receive, de-digitize and de-packetize the packeted digital video signals back into the analog video signals.

With respect to independent claim 165, the Office Action identified Rhyne’s workstation 16 as allegedly corresponding to the claimed “user station,” and Rhyne’s host computer 10 as allegedly corresponding to the claimed “remote station.” (Office Action, p. 4). Thus, claim 168 requires the “remote computer” to have “a video processor to receive, de-digitize and de-packetize the packeted digital video signals back into the analog video signals.” The “digital

video signals" received by the "video processor" are the signals that the "video processor" of claim 165 digitized and packetized. Rhyne's host computer 10, however, has no such "video processor." Rhyne's host computer 10 never receives video signals, much less digital video signals, from the workstation. Thus, the Rhyne citation fails to disclose at least this element of claim 168.

The anticipation rejection of claim 168 should be withdrawn for these additional reasons.

3. Claim 186

Independent claim 186 recites:

186. A system for interfacing keyboard signals with a selected computer processor generating video signals, comprising:

an on-screen display generator to create a menu for a monitor associated with the keyboard signals, said menu listing the selected computer processor among a plurality of other computer processors for selection by a user of the monitor;

a network access device to interface with a network including the plurality of computer processors and the selected computer processor;

a video interface to receive information indicative of the video signals from the network via the network access device;

a keyboard interface to read the keyboard signals and to deliver the keyboard signals to the selected computer processor via the network and the network access device.

The cited portions of Rhyne do not disclose a system for interfacing keyboard signals with a selected computer processor including "an on-screen display generator to create a menu for a monitor associated with the keyboard signals, said menu listing the selected computer processor among a plurality of other computer processors for selection by a user of the monitor." Col. 4:58-61 merely states that the operating system of the workstation can be a UNIX-based system or the Virtual Resource Manager from IBM. Presumably, the Office Action is equating

the workstation with the “selected computer processor” recited in claim 186. There is no disclosure in the Rhyne citation of an “on-screen display generator that “create[s] a menu for a monitor associated with the keyboard signals.” Nor is there any disclosure of an “on-screen display processor” in which “said menu list[s] the selected computer processor among a plurality of other computer processors for selection by a user of the monitor.” These claim elements are entirely missing from the cited portions of Rhyne.

The cited portion of Rhyne also fails to disclose “a video interface to receive information indicative of the video signals from the network via the network access device.” The “video signals” are the video signals generated by the “selected computer processor” that is one of a “plurality of computer processors.” Col. 10:1-11 cited in the Office Action explains that there are “messages” that are exchanged between the workstation and the host computer, and that the workstation responds to received messages by updating the spreadsheet display. But there is no disclosure of “information indicative of the video signals” from the “selected computer processor” that is received by a “video interface” from “the network via the network access device.”

The cited portion of Rhyne also fails to disclose “a keyboard interface to read the keyboard signals and to deliver the keyboard signals to the selected computer processor via the network and the network access device.” Column 10:31-67 of Rhyne describes aspects of the application protocol running on workstation 16. The Rhyne citation makes no mention of the “deliver[y of] the keyboard signals to the selected computer processor via the network and the network access device.” The Rhyne citation does not describe the sending of keyboard signals across a network, much less the remainder of the elements recited in this portion of claim 186.

The anticipation rejection of claim 186 should be withdrawn for each of the above reasons.

4. Claim 187

Dependent claim 187 recites:

187. A system according to claim 186, also for interfacing mouse signals with the selected computer processor, further comprising:

a mouse interface to read the mouse signals and to deliver the mouse signals to the selected computer processor via from the network and the network access device.

In addition to each of the patentability reasons expressed above for claim 186, dependent claim 187 is patentable for an additional reason. The cited portion of Rhyne does not disclose “a mouse interface ... to deliver the mouse signals to the selected computer processor via from the network and the network access device.” Column 9:27-42 of Rhyne describes aspects of the application protocol’s response to the entry of keyboard or mouse signals. But the application protocol runs on workstation 16. There is no disclosure of the delivery of “mouse signals to the selected computer processor via from the network and the network access device.”

Thus, claim 187 is additionally patentable over the cited reference for at least this reason.

5. Claim 188

Dependent claim 188 recites:

188. A system according to claim 186, wherein:

the keyboard interface communicates with the selected computer processor through a keyboard port of the selected computer processor.

In addition to each of the patentability reasons expressed above for claim 186, dependent claim 187 is patentable for an additional reason. The cited portion of Rhyne does not disclose that “the keyboard interface communicates with the selected computer processor through a

keyboard port of the selected computer processor.” Column 9:27-42 of Rhyne describes aspects of the application protocol’s response to the entry of keyboard or mouse signals. But the application protocol runs on workstation 16. As explained in claim 186, the “keyboard signals” are those that are delivered to the selected computer processor via the network and the network access device. Claim 188 states that the “keyboard interface,” that reads and delivers the keyboard signals via the network and the network access device, “communicates with the selected computer processor through a keyboard port of the selected computer processor.” In the Rhyne citation, there is no disclosure of such a “keyboard interface” or of “a keyboard port of the selected computer processor” that communicates with the keyboard interface.

Thus, claim 188 is additionally patentable over the cited reference for at least this reason.

6. Claim 189

Dependent claim 189 recites:

189. A system according to claim 187, wherein:

the mouse interface communicates with the selected computer processor through a mouse port of the selected computer processor.

In addition to each of the patentability reasons expressed above for claim 187, dependent claim 189 is patentable for at least an additional reason. The cited portion of Rhyne does not disclose that “the mouse interface communicates with the selected computer processor through a mouse port of the selected computer processor.” Column 9:27-42 of Rhyne describes aspects of the application protocol’s response to the entry of keyboard or mouse signals. But the application protocol runs on workstation 16. As explained in claim 187, the “mouse signals” are those that are delivered to the selected computer processor via the network and the network access device. Claim 189 states that the “mouse interface,” that reads and delivers the mouse signals via the network and the network access device, “communicates with the selected

computer processor through a mouse port of the selected computer processor.” In the Rhyne citation, there is no disclosure of such a “mouse interface” or of “a mouse port of the selected computer processor” that communicates with the mouse interface.

Thus, claim 189 is additionally patentable over the cited reference for at least this reason.

7. Claim 212

Independent claim 212 recites:

212. A remote access system communicating with a digital network transmission medium to communicate user input signals from a remote computer to a host computer via the transmission medium and video signals from the host computer to the remote computer via the transmission medium, comprising:

- a user input process to capture the user input signals for digital transmission to the host computer;
- a video process to capture the video signals, digitize them and format them for transmission to the remote computer, even when the host computer has locked up to no longer accept any user input signals;
- a standard remote access engine:
- to communicate the user input signals on the transmission medium between the host and remote computers, and
- to communicate the video signals, in digital format, on the transmission medium between the host and remote computers, even when the host computer has locked up to no longer accept any user input signals.

The cited portion of Rhyne does not disclose a remote access system including “a video process to capture the video signals, digitize them and format them for transmission to the remote computer, even when the host computer has locked up to no longer accept any user input signals.” The Rhyne citation does not disclose the capture, digitizing, and formatting of video signals for transmission to a remote computer. The Office Action cites col. 10:18-54. But this portion of Rhyne merely describes the operation of the application protocol running on

workstation 16. Presumably this means that the Examiner contends that Rhyne's host computer corresponds to the claimed "remote computer." Rhyne does not send captured, digitized and formatted video signals from the workstation to the host computer.

Moreover, Rhyne does not disclose the capture, digitization, and formatting of video signals for transmission "even when the host computer has locked up to no longer accept any user input signals." No such feature is even remotely disclosed in the Rhyne citation.

The cited portion of Rhyne does not disclose "to communicate the video signals, in digital format, on the transmission medium between the host and remote computers, even when the host computer has locked up to no longer accept any user input signals." The Office Action cites Rhyne's column 10:1-11. Again, that citation describes aspects of Rhyne's application protocol running on workstation 16. The Rhyne citation does not disclose the communication of any video signals, in a digital format or otherwise, on the transmission medium between the alleged host and remote computers. The Rhyne citation certainly does not disclose, or even suggest, that the system communicates such signals "even when the host computer has locked up to no longer accept any user input signals."

The anticipation rejection of claim 212 should be withdrawn for each of the above reasons.

8. Claim 220

Independent claim 220 recites:

220. A computer having a virtual path communication link with a remote computer over a network medium, comprising:

a remote access engine;

a data bus;

a set of circuit modules in communication with a set of corresponding host computers to receive analog video signals from the corresponding host computers, to digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus;

a communication port establishing a network connection via the network medium for the remote access engine and a selected one of said set of circuit modules to receive the digitized and synchronized video signals and to deliver the selected digitized video signals to the remote computer for display.

Claim 220 begins by reciting a “computer” including “a remote access engine.” The Office Action cites Rhyne at column 4, line 64-column 5, line 3, as allegedly disclosing a computer with a remote access engine. But the Rhyne citation never states that the communication service 24 is a computer with a remote access engine. Rhyne merely states that it can be a “conventional facility for interconnecting a plurality of remote users to a central processor such as a host 10.” This “facility” can be something as simple as an Ethernet switch. Thus, Rhyne fails to provide any detail of this facility; it is not inherent that the facility be a computer with a remote access engine.

With respect to the claimed “set of circuit modules” that is recited as part of the “computer,” the Office Action inconsistently asserts that Rhyne’s workstation 16 satisfies that portion of the claim. (Office Action, p. 6 (citing Rhyne col. 8:5-36)). For the “remote access engine” claim element, the Office Action alleged that the communication service 24 satisfied that element of the claimed “computer,” but then alleges that an entirely different component of the Rhyne system (i.e., the workstation 16) satisfies the “set of circuit modules” portion of the claimed “computer.” Thus, the Office Action has failed to identify a single alleged “computer” that satisfies all elements of claim 220, notwithstanding the fact that the rejection of claim 220 is an anticipation rejection.

Apart from the fact that the Office Action has identified two separate components of the Rhyne system, the Rhyne citation does not disclose “a set of circuit modules in communication with a set of corresponding host computers to receive analog video signals from the corresponding host computers, to digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus.” First, the Rhyne citation simply describes the application protocol in the workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. Rhyne does not disclose more than a single host computer, and thus, there cannot be “a set of circuit modules in communication with a set of corresponding host computers” as recited in claim 220.

In addition, nothing in the workstation 16 “receive[s] analog video signals from the corresponding host computers.” No video signals are sent from Rhyne’s host computer to the workstation. Moreover, nothing in workstation 16 is adapted “to digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus.” These aspects of claim 220 are completely missing from the Rhyne citation.

Finally, the cited portion of Rhyne fails to disclose the claimed “computer” having “a communication port establishing a network connection via the network medium for the remote access engine and a selected one of said set of circuit modules to receive the digitized and synchronized video signals and to deliver the selected digitized video signals to the remote computer for display.” The Office Action again cites to column 8:5-36 as allegedly disclosing this element of claim 220. But the Rhyne citation describes the application protocol in the

workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. The Rhyne citation does not disclose a “communication port … to receive the digitized and synchronized video signals and to deliver the selected digitized video signals to the remote computer for display.” Rhyne does not deliver video signals (digital or analog) from the workstation to the host computer. Rhyne’s host computer (i.e., the alleged “remote computer”) does not include a monitor that is capable of displaying video signals. This element is not disclosed in the Rhyne citation.

The anticipation rejection of claim 220 should be withdrawn for each of the above reasons.

9. Claim 221

Dependent claim 221 recites:

221. A computer according to claim 220, wherein:

each circuit module includes:

a main CPU to coordinate an analog to digital conversion of host video signals from a corresponding host computer;

a field programmable gate array, in communication with the main CPU;

a video interface circuit, in communication with the field programmable gate array, to capture the host video signals for the main CPU and field programmable gate array;

a video RAM to store host video signals digitized by the main CPU and field programmable gate array, and to deliver the digitized video signals to the remote access engine for delivery to the remote computer, the video RAM in communication with the field programmable gate array to receive at least video sync processing from the field programmable gate array;

at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer;

a bus controller, in communication with the field programmable gate array, to communicate information identifying the digitized host video signals and the mouse and keyboard information to the remote access engine.

Dependent claim 221 recites specific elements of each of the “circuit modules” included as part of the “computer” recited in claim 220. The Office Action alleges that the claimed “main CPU,” “field programmable gate array,” and “bus controller” of each “circuit module” are disclosed at Rhyne, column 8:5-36. (Office Action, p. 7). But that Rhyne citation describes the application protocol in the workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. There are no specific circuit components described in this portion of Rhyne whatsoever. Thus, Rhyne does not disclose these elements of claim 221.

The Office Action alleges that Rhyne’s column 10:31-54 discloses the “video interface circuit” and “video RAM” recited in claim 221. This paragraph of Rhyne describes some aspects of the application protocol that runs on workstation 16. But again, this portion of Rhyne does not describe any specific circuit components at all. Thus, Rhyne does not disclose these elements of claim 221 either.

Finally, the Office Action cites to Rhyne’s Figure 3, items 46 and 48 as allegedly disclosing “at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer.” The citation to Rhyne, however, identifies the keyboard driver 46 and mouse driver 48 of the workstation that interface directly with the keyboard and mouse. Those drivers are not disclosed as receiving keyboard and mouse information “from the remote computer” as recited in claim 221.

The anticipation rejection of claim 221 should be withdrawn for each of the above reasons.

10. Claim 211

Independent claim 211 recites:

211. A circuit module for a computer having in operation therein a remote access engine to communicate between a host server and a remote workstation, comprising:
 - a main CPU to coordinate an analog to digital conversion of host video signals from the host server;
 - a field programmable gate array, in communication with the main CPU;
 - a video interface circuit, in communication with the field programmable gate array, to capture the host video signals for the main CPU and field programmable gate array;
 - a video RAM to store host video signals digitized by the main CPU and field programmable gate array, and to deliver the digitized video signals to the remote access engine for delivery to the remote computer, the video RAM in communication with the field programmable gate array to receive at least video sync processing from the field programmable gate array;
 - at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer;
 - a bus controller, in communication with the field programmable gate array, to communicate information identifying the digitized host video signals and the mouse and keyboard information to the remote access engine.

For claim 211, the Office Action merely states that “Claim 211 is substantially the same as claims 220-221.” (Office Action, p. 7). This appears to be an incomplete rejection because it does not expressly identify where in Rhyne each element of claim 211 is allegedly disclosed. To the extent that the elements of claim 211 correspond to an element of either claim 220 or 221, I

will assume that the Office Action is making the exact same rejection for claim 211, and respond to those arguments accordingly.

Claim 211 recites a “circuit module” including several elements. The Office Action alleges that the claimed “main CPU,” “field programmable gate array,” and “bus controller” of each “circuit module” are disclosed at Rhyne, column 8:5-36. (Office Action, p. 7). But that Rhyne citation describes the application protocol in the workstation and the application program in the host computer as separate processes that operate asynchronously and exchange parameters between themselves. There are no specific circuit components described in this portion of Rhyne whatsoever. Thus, Rhyne does not disclose these elements of claim 211.

The Office Action alleges that Rhyne’s column 10:31-54 discloses the “video interface circuit” and “video RAM” recited in claim 211. This paragraph of Rhyne describes some aspects of the application protocol that runs on workstation 16. But again, this portion of Rhyne does not describe any specific circuit components at all. Thus, Rhyne does not disclose these elements of claim 211 either.

Finally, the Office Action cites to Rhyne’s Figure 3, items 46 and 48 as allegedly disclosing “at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer.” The citation to Rhyne, however, identifies the keyboard driver 46 and mouse driver 48 of the workstation that interface directly with the keyboard and mouse. Those drivers are not disclosed as receiving keyboard and mouse information “from the remote computer” as recited in claim 211.

The anticipation rejection of claim 211 should be withdrawn for each of the above reasons.

11. Claim 243

Independent claim 243 recites:

243. A remote access device for communicating real time video signals from a host PC to a remote PC and for communicating mouse signals entered in response to the real time video signals from the remote PC to the host PC, comprising:

a video process to capture and digitize the video signals from the host PC including video signals indicating a position of a mouse pointer on a monitor associated with the host PC, the position of said mouse pointer identified by the video process being delayed by a period associated with the capturing and digitizing steps;

a mouse synchronizer to capture a current mouse position of the mouse pointer on the monitor associated with the remote PC;

a video application to communicate the current mouse position of the mouse pointer on the monitor associated with the remote PC to the host PC whereupon the host PC jumps the host mouse pointer to a position coincident with the current mouse position.

The Office Action alleges that Rhyne column 10, line 55 through column 11, line 5, discloses each element of claim 243. (Office Action, p. 8). But this portion of Rhyne describes aspects of how the application protocol running on workstation 16 processes mouse inputs to update the spreadsheet being displayed on the workstation monitor. The Rhyne citation does not disclose “a video process to capture and digitize video signals from the host PC including video signals indicating a position of a mouse pointer on a monitor associated with the host PC, the position of said mouse pointer identified by the video process being delayed by a period associated with the capturing and digitizing steps.” The Rhyne citation does not disclose “a mouse synchronizer to capture a current mouse position of the mouse pointer on the monitor associated with the remote PC.” Nor does the Rhyne citation disclose “a video application to communicate the current mouse position of the mouse pointer on the monitor associated with the remote PC to the host PC whereupon the host PC jumps the host mouse pointer to a position

coincident with the current mouse position.” There is no discussion of capturing and digitizing video signals, or the synchronization of mouse positions between two computers. In fact, it is not entirely clear what portion of the Rhyne system the Office Action alleges corresponds to the “remote PC” and what portion allegedly corresponds to the “host PC.” In any event, the elements of claim 243 are entirely missing from the Rhyne citation.

The anticipation rejection of claim 243 should be withdrawn for each of the above reasons.

12. Claim 244

Dependent claim 244 recites:

244. A remote access device according to claim 243, wherein the current mouse position is communicated from the remote computer to the mouse synchronizer in the form of current X/Y coordinates of the remote computer mouse pointer.

The Office Action alleges that Rhyne column 10, line 55 through column 11, line 5, and column 19, lines 46-66 discloses the subject matter of claim 244. (Office Action, p. 8). The first citation to Rhyne describes aspects of how the application protocol running on workstation 16 processes mouse inputs to update the spreadsheet being displayed on the workstation monitor. The second citation also describes aspects of the application protocol running on workstation 16 relating to how the mouse cursor movements at workstation 16 are echoed to the monitor of workstation 16, and how the spreadsheet is updated or altered in response to the mouse movements. But claim 244 requires the “current mouse position” be communicated “from the remote computer” (i.e., alleged to be Rhyne’s host computer) to “the mouse synchronizer” in the “remote access device.” The Rhyne citation entirely fails to disclose the subject matter of claim 244.

The anticipation rejection of claim 244 should be withdrawn for each of the above reasons.

13. Claim 245

Dependent claim 245 recites:

245. A remote access device according to claim 243, wherein the mouse synchronizer captures the current mouse position of the mouse pointer on the monitor associated with the remote PC whenever a remote user clicks a mouse button.

The Office Action cites Rhyne column 5, line 65 through column 6, line 3, as allegedly disclosing the subject matter of claim 245. (Office Action, p. 8). According to claims 245 and 243, the “mouse synchronizer” is part of a “remote access device for communicating real time video signals from a host PC to a remote PC and for communicating mouse signals entered in response to the real time video signals from the remote PC to the host PC.” Presumably, Rhyne’s host computer allegedly corresponds to the claimed “remote PC” and the workstation allegedly corresponds to the claimed “host PC.” According to the claim, the mouse synchronizer captures the current mouse position of the mouse pointer on the monitor associated with the remote PC (i.e., Rhyne’s host computer) whenever a remote user clicks on a mouse button. But there is no mouse that is disclosed to be associated with Rhyne’s host computer. The only mouse shown is associated with the workstation 16, which seems to correspond with what the Examiner asserts to be the “host PC.”¹ Thus, there is no mouse position associated with the “remote PC” under the Examiner’s view of Rhyne. Moreover, even if the workstation is now viewed as the “remote PC,” the position of the mouse at the workstation is not sent to any device that is alleged

¹ This confusion stems from the fact that the Office Action did not clearly identify what part of Rhyne’s system allegedly corresponds to the “host PC” and what allegedly corresponds to the “remote PC” in independent claim 243.

to be a “remote access device.” In fact, the mouse position is not even sent to the host computer in Rhyne. Instead, Rhyne’s workstation interprets the keyboard and mouse inputs, processes those inputs in the application protocol running on the workstation, and, if appropriate, sends parameters or commands to the host computer. (Col. 8:5-36). The Rhyne citation does not disclose the subject matter of claim 245.

The anticipation rejection of claim 245 should be withdrawn for each of the above reasons.

14. Claim 246

Independent claim 246 recites:

246. A remote access interface between a remote workstation having an associated remote monitor and a host device having an associated host monitor, comprising:

a host mouse;

a video capture circuit to intercept analog video signals from the host device and applying the analog video signals to the host monitor such that the host monitor displays a host pointer associated with the host mouse;

a mouse capture circuit to capture remote mouse signals from the remote workstation over a telecommunication path and to transmit the remote mouse signals to the host device for further processing as though the remote mouse signals were received from the host mouse;

a mouse adjustment process to cause the host pointer on the host monitor to jump to a position determined by the remote mouse signals.

The Office Action alleges that Rhyne, column 5, line 16, and column 10, line 55 through column 11, line 5, discloses each element of claim 246. These portions of Rhyne describe various aspects of workstation 16. Column 5, line 16, simply states that the workstation includes a mouse. Column 10, line 55 through column 11, line 5, states that the application protocol

running on the workstation will receive mouse inputs, update the mouse location on the workstation monitor, and update or modify the spreadsheet being manipulated at the workstation. These portions of Rhyne do not disclose (1) “[a] remote access interface between a remote workstation having an associated remote monitor and a host device having an associated host monitor;” (2) “a video capture circuit to intercept analog video signals from the host device and applying the analog video signals to the host monitor such that the host monitor displays a host pointer associated with the host mouse;” (3) “a mouse capture circuit to capture remote mouse signals from the remote workstation over a telecommunication path and to transmit the remote mouse signals to the host device for further processing as though the remote mouse signals were received from the host mouse;” or (4) “a mouse adjustment process to cause the host pointer on the host monitor to jump to a position determined by the remote mouse signals.” Rhyne does not disclose a “video capture circuit,” a “mouse capture circuit to capture remote mouse signals from the remote workstation” (i.e., Rhyne’s host computer), or “a mouse adjustment process.” All of these elements are completely missing from the cited portions of Rhyne.

The anticipation rejection of claim 246 should be withdrawn for each of the above reasons.

D. Rejection of Claims 157-162 and 241-242 under 35 U.S.C. § 102(b) as being Anticipated by Lemon (US 4,674,041)

The Office Action cites Lemon, US 4,674,041, as allegedly anticipating claims 157-162 and 241-242 under 35 U.S.C. § 102(b). I find that the cited portions of Lemon do not disclose the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. Claim 157

Independent claim 157 recites:

157. A system for monitoring a host computer from a remote processor
the host computer including a host processor and a host display
device port and the remote processor including a remote display
device comprising:

a host unit connected between the remote processor and the host
computer which (1) causes screen data output on the host display
device port to appear also on the remote display device whereby at
least a situation requiring a reset operation appears at the host unit
and (2) upon receipt of a reset command, causes the host unit to
initiate a reset operation of the host computer.

Claim 157 recites a system for monitoring a “host computer” from a “remote processor.”

The “host computer” includes a “host processor” and a “host display device port.” The “remote processor” includes a “remote display device.” A “host unit” is connected between the “remote processor” and the “host computer.” In addition, the “host unit” “(1) causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit and (2) upon receipt of a reset command, causes the host unit to initiate a reset operation of the host computer.”

Lemon describes a system for distributing coupons or other certificates for retail sales of merchandise. (Lemon, col. 1:7-12). Each retail store has a terminal that communicates with a host central processing unit located remote from the stores. (Lemon, col. 2:5-8). The terminals may be monitored and controlled via the host computer to obtain data such as the number of coupons issued, etc. (Lemon, col. 2:13-17).

The Office Action alleges that Lemon’s column 26, lines 28-37, and column 27, lines 55-56, disclose “a host unit connected between the remote processor and the host computer which (1) causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit and (2)

upon receipt of a reset command, causes the host unit to initiate a reset operation of the host computer.” The column 26 citation to Lemon states that the terminal T periodically initiates a call to the host H when the full capacity in non-volatile memory 56 allocated for coupon history data is exhausted. (Lemon, col. 26:28-32). The data that is sent to host H is coupon history information and coupon count data. (Lemon, col. 26:38-55). The cited portions of Lemon do not disclose a host unit that “causes screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit.” The Lemon citation never describes an arrangement in which screen data output on the host display device port appears on the remote display device. In the Lemon citation, no screen data from the terminal T, for example, is displayed on a display device associated with host H. This aspect of claim 157 is entirely missing from the Lemon citations.

More fundamentally, however, claim 157 describes a system having at least three components – a remote processor, a host computer, and “a host unit connected between the remote processor and the host computer.” The cited portions of Lemon relate to a system having only a group of terminals and a host computer. Those devices are connected by a modem, but the Office Action does not allege that the modem corresponds to the remote processor, the host computer or the host unit. Instead, by alleging that the terminal T discloses the “host unit ...” claim elements, the Office Action is implicitly alleging that the “host unit” corresponds to terminal T. (Lemon, col. 26:28-37). Thus, one of the components expressly recited in claim 157 is missing from the Lemon reference. Either the host unit or the remote processor is not disclosed in Lemon as Lemon has been construed in the Office Action.

The anticipation rejection of claim 157 should be withdrawn for each of the above reasons.

2. Claim 158

Dependent claim 158 recites:

158. The system of claim 157, wherein the host unit also automatically causes a reset operation whenever a connection between the remote processor and the host unit is terminated.

The Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 158. But Lemon's column 10, lines 28-60, describes aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons. This portion of Lemon does not relate to a host unit "automatically caus[ing] a reset operation whenever a connection between the remote processor and the host unit is terminated." The Lemon citation has nothing to do with causing a reset operation.

The anticipation rejection of claim 158 should be withdrawn for at least the above reason.

3. Claim 159

Dependent claim 159 recites:

159. The system of claim 157, wherein the host unit receives communications from the remote processor via a telephone carrier signal and the host unit includes a carrier detect circuit and automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.

The Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 159. But Lemon's column 10, lines 28-60, describes aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons. This portion of Lemon does not relate to a host unit "unit receiv[ing] communications from the remote processor via a telephone carrier signal and the host unit include[ing] a carrier detect circuit and automatically causes the reset operation upon a

determination made by the carrier detect circuit of the absence or presence of the carrier signal.”

The Lemon citation has nothing to do with communications with a remote processor.

The anticipation rejection of claim 159 should be withdrawn for at least the above reason.

4. Claim 160

Independent claim 160 recites:

160. A method of monitoring a computer system comprising:

providing a host unit between a host computer and a remote processor;
the host computer including a host processor and a host display
device port, the remote processor including a remote display
device;

using the host unit to cause screen data output on the host display
device port to appear also on the remote display device whereby at
least a situation requiring a reset operation appears at the host unit;
and

receiving a reset command at the host unit and thereupon causing the
host unit to initiate a reset operation of the host computer.

For claim 160, the Office Action states that “Claim 160 is substantially the same as claim 157.” (Office Action, p. 9). This appears to be an incomplete rejection because it does not expressly identify where in Lemon each element of claim 160 is allegedly disclosed. To the extent that the elements of claim 160 correspond to an element of claim 157, I will assume that the Office Action is making the exact same rejection for claim 160, and respond to those arguments accordingly.

Claim 160 recites a method of monitoring a “computer system” including providing a “host unit” between a “host computer” and a “remote processor.” The “host computer” includes a “host processor” and a “host display device port.” The “remote processor” includes a “remote display device.” In addition, the method includes “using the host unit to cause screen data output on the host display device port to appear also on the remote display device whereby at least a

situation requiring a reset operation appears at the host unit; and receiving a reset command at the host unit and thereupon causing the host unit to initiate a reset operation of the host computer.”

Lemon describes a system for distributing coupons or other certificates for retail sales of merchandise. (Lemon, col. 1:7-12). Each retail store has a terminal that communicates with a host central processing unit located remote from the stores. (Lemon, col. 2:5-8). The terminals may be monitored and controlled via the host computer to obtain data such as the number of coupons issued, etc. (Lemon, col. 2:13-17).

The Office Action implicitly alleges that Lemon’s column 26, lines 28-37, and column 27, lines 55-56, disclose “using the host unit to cause screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit; and receiving a reset command at the host unit and thereupon causing the host unit to initiate a reset operation of the host computer.” The column 26 citation to Lemon states that the terminal T periodically initiates a call to the host H when the full capacity in non-volatile memory 56 allocated for coupon history data is exhausted. (Lemon, col. 26:28-32). The data that is sent to host H is coupon history information and coupon count data. (Lemon, col. 26:38-55). The cited portions of Lemon do not disclose using a host unit “to cause screen data output on the host display device port to appear also on the remote display device whereby at least a situation requiring a reset operation appears at the host unit.” The Lemon citation never describes an arrangement in which screen data output on the host display device port appears on the remote display device. In the Lemon citation, no screen data from the terminal T, for example, is displayed on a display device associated with host H. This aspect of claim 160 is entirely missing from the Lemon citations.

More fundamentally, however, claim 160 describes a method of monitoring a system having at least three components – a remote processor, a host computer, and “a host unit connected between the remote processor and the host computer.” The cited portions of Lemon relate to a system having only a group of terminals and a host computer. Those devices are connected by a modem, but the Office Action does not allege that the modem corresponds to the remote processor, the host computer or the host unit. Instead, by alleging that the terminal T discloses the “host unit ...” claim elements, the Office Action is implicitly alleging that the “host unit” corresponds to terminal T. (Lemon, col. 26:28-37). Thus, one of the components expressly recited in claim 160 is missing from the Lemon reference. Either the host unit or the remote processor is not disclosed in Lemon as Lemon has been construed in the Office Action.

The anticipation rejection of claim 160 should be withdrawn for each of the above reasons.

5. Claim 161

Dependent claim 161 recites:

161. The method of claim 160, wherein the host unit also automatically causes a reset operation whenever a connection between the remote processor and the host unit is terminated.

For claim 161, the Office Action states that “Claim 161 is substantially the same as claim 158.” (Office Action, p. 9). This appears to be an incomplete rejection because it does not expressly identify where in Lemon each element of claim 161 is allegedly disclosed. To the extent that the elements of claim 161 correspond to an element of claim 158, I will assume that the Office Action is making the exact same rejection for claim 161, and respond to those arguments accordingly.

Implicitly, the Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 161. But Lemon's column 10, lines 28-60, describes aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons. This portion of Lemon does not relate to a host unit "automatically caus[ing] a reset operation whenever a connection between the remote processor and the host unit is terminated." The Lemon citation has nothing to do with causing a reset operation.

The anticipation rejection of claim 161 should be withdrawn for at least the above reason.

6. Claim 162

Dependent claim 162 recites:

162. The method of claim 161, further including the steps of receiving communications from the remote processor at the host unit via a telephone carrier signal and wherein the host unit includes a carrier detect circuit and automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.

For claim 162, the Office Action states that "Claim 162 is substantially the same as claim 159." (Office Action, p. 9). This appears to be an incomplete rejection because it does not expressly identify where in Lemon each element of claim 162 is allegedly disclosed. To the extent that the elements of claim 162 correspond to an element of claim 159, I will assume that the Office Action is making the exact same rejection for claim 162, and respond to those arguments accordingly.

The Office Action alleges that Lemon, column 10, lines 28-60, discloses the subject matter of claim 162. But Lemon's column 10, lines 28-60, describes aspects of the operation of microcomputer 22 within terminal T. More specifically, this passage describes how and when the terminal dispenses coupons. This portion of Lemon does not relate to "receiving

communications from the remote processor at the host unit via a telephone carrier signal and wherein the host unit includes a carrier detect circuit and automatically causes the reset operation upon a determination made by the carrier detect circuit of the absence or presence of the carrier signal.” The Lemon citation has nothing to do with communications with a remote processor.

The anticipation rejection of claim 162 should be withdrawn for at least the above reason.

7. Claims 241 and 242

Independent claim 241 recites:

241. A remote access PC to facilitate communications between a host computer and a remote computer distantly located relative to each other, comprising:

a remote access process to establish a logical data path between the host computer and the remote computer;

a control module having an AC power input to receive AC power from an external power source, an AC power output to deliver the AC power from the external power source to the host computer, a switch therebetween, and a control data input to receive a reboot signal and thereupon interrupt AC power to the host computer by operation of the switch;

a communication circuit establishing a different logical data path between the remote computer and the communication circuit, the communication circuit delivering the reboot signal to the control module when commanded to do so by the remote computer via the different logical data path.

Dependent claim 242 recites:

242. A remote access PC according to claim 241, wherein the communication circuit is a modem.

Claim 241 recites at least three devices – a host computer, a remote computer distantly located relative to the host computer, and a remote access PC. The remote access PC facilitates communications between the host computer and the remote computer. The remote access PC includes a remote access process, a control module, and a communication circuit.

The Office Action alleges that Lemon's column 26, lines 28-37, discloses the "remote access process ..." portion of the claimed remote access PC. Thus, according to the Office Action, the terminal T described in column 26, lines 28-37, corresponds to the "remote access PC." But Lemon's terminal T does not "facilitate communications between a host computer and a remote computer distantly located relative to each other." Assuming that Lemon's host computer corresponds to the claimed host computer, Lemon does not disclose another device that could correspond to the claimed "remote computer." Thus, the Lemon citations do not disclose "a remote access process to establish a logical data path between the host computer and the remote computer." Likewise, the Lemon citations do not disclose "a communication circuit establishing a different logical data path between the remote computer and the communication circuit, the communication circuit delivering the reboot signal to the control module when commanded to do so by the remote computer via the different logical data path."

The Office Action alleges that Lemon's column 8, lines 54-55, and column 27, lines 55-56, disclose "a control module having an AC power input to receive AC power from an external power source, an AC power output to deliver the AC power from the external power source to the host computer, a switch therebetween, and a control data input to receive a reboot signal and thereupon interrupt AC power to the host computer by operation of the switch." The column 8 citation simply states that Lemon's terminal T has a power supply and that the power supply may include a keyed switch 64 to prevent people who do not have the key from energizing or de-energizing the terminal. The column 27 citation refers to "host to terminal" commands to reboot the terminal to update coupon data. Neither citation discloses a "control module" having "a control data input to receive a reboot signal and thereupon interrupt AC power to the host

computer by operation of the switch.” Indeed, the Office Action not attempted to identify a specific circuit or device that allegedly corresponds to the “control module.”

The “remote access PC” of claim 241 also includes “a communication circuit establishing a different logical data path between the remote computer and the communication circuit, the communication circuit delivering the reboot signal to the control module when commanded to do so by the remote computer via the different logical data path.” Thus, “the reboot signal” is delivered by the “communication circuit” to “the control module when commanded to do so by the remote computer via the different logical data path.” The Office Action alleges that Lemon’s column 26, lines 28-37, and column 27, lines 55-56, disclose this element. The column 26 citation to Lemon states that the terminal T periodically initiates a call to the host H when the full capacity in non-volatile memory 56 allocated for coupon history data is exhausted. (Lemon, col. 26:28-32). The data that is sent to host H is coupon history information and coupon count data. (Lemon, col. 26:38-55). The column 27 citation refers to “host to terminal” commands to reboot the terminal to update coupon data. But because the Office Action equates the terminal T with the “remote access PC,” the Lemon citations do not disclose a “remote computer” that is in communication with the “communication circuit” of the “remote access PC.” In addition, the Office Action not attempted to identify a specific circuit that corresponds to the “communication circuit” or a circuit or device that allegedly corresponds to the “control module.”

Dependent claim 242 is not anticipated by Lemon for at least the reasons provided above for claim 241.

The anticipation rejections of claims 241 and 242 should be withdrawn for each of the above reasons.

E. Rejection of Claims 194-210 under 35 U.S.C. § 102(b) and 35 U.S.C. § 102(a) as being Anticipated by Edgard (US 5,248,964)

The Office Action cites Edgard, US 5,248,964, as allegedly anticipating claims 194-210 under 35 U.S.C. § 102(b) and 35 U.S.C. § 102(a). I find that the cited portions of Edgard do not disclose the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. Claim 194

Independent claim 194 recites:

194. A computer monitoring system for monitoring the information displayed on a video display terminal connected to, and receiving display information from, a data processing device comprising:

a microprocessor controlled computer hardware device working even if the data processing device is locked up and no longer processing data or input commands, wherein the microprocessor controlled computer hardware device includes a video raster signal input circuit for receiving a video raster signal representative of the information displayed on the video display terminal from the data processing device and a converter communicating with the video raster signal input circuit to convert the video raster signal into a digital signal representative of the information contained in the video raster signal.

Claim 194 recites a “data processing device” and a “microprocessor controlled computer hardware device.” The “microprocessor controlled computer hardware device” works even if the “data processing device” is locked up and no longer processing data or input commands. The “microprocessor controlled computer hardware device” also includes a “video raster signal input circuit” for receiving the video raster signal representative of the information displayed on the video display terminal from the data processing device. The “microprocessor controlled computer hardware device” also includes “a converter communicating with the video raster

signal input circuit to convert the video raster signal into a digital signal representative of the information contained in the video raster signal.”

The Office Action alleges that Edgard’s column 2, lines 43-64, discloses the subject matter of claim 194. But Edgard discloses a single computer with a more efficient operation for writing character to and reading characters from the video buffer when in graphics mode. (Edgard, col. 2, lines 26-30; Fig. 1). The cited section from Edgard describes aspects of how the computer writes information to, and reads information from the computer’s video memory. The Edgard citation does not disclose two devices that could correspond to the “data processing device” and a “microprocessor controlled computer hardware device” of claim 194. The Edgard citation does not disclose “a microprocessor controlled computer hardware device working even if the data processing device is locked up and no longer processing data or input commands.” The Edgard citation also does not disclose a “microprocessor controlled computer hardware device include[ing] a video raster signal input circuit for receiving a video raster signal representative of the information displayed on the video display terminal from the data processing device.” Nor does the Edgard citation disclose “a converter communicating with the video raster signal input circuit to convert the video raster signal into a digital signal representative of the information contained in the video raster signal.” The Edgard citation does not relate to reception and conversion of a video raster signal from a data processing device into a digital signal representative of the video raster signal. The Office Action fails to specifically identify what circuit in Edgard’s system allegedly corresponds to the “microprocessor controlled computer hardware device.” In fact, the cited portion of Edgard has very little, if any, relevance to the subject matter recited in claim 194.

The anticipation rejection of claim 194 should be withdrawn for each of the above reasons.

2. Claim 195

Dependent claim 195 recites:

195. The system according to claim 194, wherein said converter comprises a character determiner for determining the identity of each character displayed on the video display terminal and for generating a digital code indicative of the identity of said each character displayed on the video display terminal, and

wherein said character determiner comprises circuitry for generating a series of cyclic redundancy checks, wherein each said cyclic redundancy check is generated from the pixel information associated with each character location on the video display terminal.

The Office Action alleges that the subject matter of claim 195 is disclosed by Edgard's column 10, lines 19-54. Edgard's column 10, lines 19-54, describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. Claim 195 further defines the "converter" that is part of the "microprocessor controlled computer hardware device" recited in claim 194. As explained above, the Office Action has not identified the "microprocessor controlled computer hardware device" or the "converter" recited in claim 194. The citation to column 10, lines 19-54, of Edgard do not remedy this omission. There is no part of the Edgard citation that discloses "a microprocessor controlled computer hardware device working even if the data processing device is locked up and no longer processing data or input commands, wherein the microprocessor controlled computer hardware device includes a video raster signal input circuit for receiving a video raster signal representative of the information displayed on the video display terminal from the data processing device and a converter communicating with the video raster signal input circuit to convert the video raster signal into a digital signal representative of

the information contained in the video raster signal.” Yet, this is required by claim 195 due to its dependency on claim 194. By reciting “said converter,” claim 195 is incorporating the claim 194 requirement that the “converter” be a part of the “microprocessor controlled computer hardware device.”

The anticipation rejection of claim 195 should be withdrawn for each of the above reasons.

3. Claim 196

Dependent claim 196 recites:

196. The system according to claim 195, further comprising a transmitter coupled to said converter for transmitting said digital code to a remote location.

The Office Action alleges that Edgard’s column 4, lines 51-67, discloses the elements of claim 196. The Edgard citation, however, describes aspects of the signal flow within or relating to ASIC 50. But the Edgard citation does not describe “a transmitter coupled to said converter for transmitting said digital code to a remote location.” The Edgard citation does not describe transmission of any data or code to a remote location. In fact, the Office Action does not specifically identify the alleged “transmitter” that is alleged to be coupled to the “converter.”

Moreover, with respect to claim 195, the Office Action implicitly alleged that processor 10 corresponded to the “character determiner” that is included as part of the “converter” of claim 195. Yet, for claim 194, the Office Action implicitly alleged that the “microprocessor controlled computer hardware device,” which includes the “converter,” corresponded to DPRB 54 since the DPRB was the primary focus of the discussion in the Edgard passage cited with respect to claim 194. Thus, the Office Action has not clearly identified which portions of Edgard’s system allegedly correspond to the elements recited in claims 194-196.

The anticipation rejection of claim 196 should be withdrawn for each of the above reasons.

4. Claim 197

Dependent claim 197 recites:

197. The system according to claim 196, further comprising:
a receiver at said remote location coupled to said transmitter for receiving said digital codes transmitted by said transmitter; and
a remote video display coupled to said receiver for displaying said digital codes received from said receiver, said display showing an image sufficiently similar to that shown on the video display terminal to allow a user to determine the operational status of the data processing device.

The Office Action alleges that Edgard's column 4, lines 17-23, discloses the elements of claim 197. But column 4, lines 17-23, merely states that the video system 36 of Edgard's computer handles the storage and display control functions for information to be displayed on CRT 38. This portion of Edgard simply discloses the particular type of video system used in the Edgard computer. The cited portion of Edgard does not disclose the elements of claim 196 – namely, "a receiver at said remote location coupled to said transmitter for receiving said digital codes transmitted by said transmitter; and a remote video display coupled to said receiver for displaying said digital codes received from said receiver, said display showing an image sufficiently similar to that shown on the video display terminal to allow a user to determine the operational status of the data processing device." These elements are entirely missing from the Edgard citation.

The anticipation rejection of claim 197 should be withdrawn for each of the above reasons.

5. Claim 198

Dependent claim 198 recites:

198. The system according to claim 195, wherein said digital codes are transmitted to a remote location in response to a command received from said remote location requesting that said digital codes be transmitted.

The Office Action cites Edgard's column 4, lines 63-67, as allegedly disclosing claim 195. But the Edgard citation simply states that ASIC 50 determines when processor 10 can access video RAM 52, when the RAM 52 is providing information to the display drive circuitry, and when the RAM 52 is being refreshed. The Edgard citation makes no mention of the "character determiner" of claim 195 that generates digital codes "wherein said digital codes are transmitted to a remote location in response to a command received from said remote location requesting that said digital codes be transmitted." The Edgard citation does not describe the reception of a command from a remote location requesting the transmission of the digital codes. Nor does the Edgard citation disclose the transmission of the digital codes to a remote location.

The anticipation rejection of claim 198 should be withdrawn for each of the above reasons.

6. Claim 199

Dependent claim 199 recites:

199. The system according to claim 195, further comprising a network for interconnecting a plurality of said microprocessor controlled computer hardware devices with one another and for allowing a user at said remote location to selectively access any one of said microprocessor controlled computer hardware devices or its associated data processing device.

The Office Action cites Edgard's column 4, lines 17-23, as allegedly disclosing claim 199. But the Edgard citation simply states that ASIC 50 determines when processor 10 can

access video RAM 52, when the RAM 52 is providing information to the display drive circuitry, and when the RAM 52 is being refreshed. The Edgard citation does not disclose “a plurality of said microprocessor controlled computer hardware devices.” Indeed, the Office Action never specifically identified the first such claimed device in the rejection of claim 194. The Edgard citation does not disclose “a network for interconnecting a “plurality of said microprocessor controlled computer hardware devices with one another.” Nor does the Edgard citation disclose “a network ... for allowing a user at said remote location to selectively access any one of said microprocessor controlled computer hardware devices or its associated data processing device.” No “remote location” is disclosed. No “selective[] access [to] any one of said microprocessor controlled computer hardware devices” is disclosed. No “associated data processing device” is disclosed either.

The anticipation rejection of claim 199 should be withdrawn for each of the above reasons.

7. Claim 200

Dependent claim 200 recites:

200. The system according to claim 195, further comprising:
 - a memory connected with said converter for storing said digital codes to retain an image of the information displayed on the video display terminal; and
 - a controller coupled to said memory and said converter for monitoring changes to said image and for storing said digital codes representative of said changes in said memory, whereby said memory contains a series of image frames that can be used by an operator to determine the cause of a system failure.

The Office Action alleges that Edgard’s column 10, lines 19-54, discloses the subject matter of claim 200. Edgard’s column 10, lines 19-54, describes aspects of the read character

sequence depicted in Figures 7A, 7B, and 7C. The Edgard citation does not disclose “a controller coupled to said memory and said converter for monitoring changes to said image and for storing said digital codes representative of said changes in said memory, whereby said memory contains a series of image frames that can be used by an operator to determine the cause of a system failure.” The Office Action has not identified the “converter” initially recited in claim 194, and thus fails to identify “a memory connected with said converter for storing said digital codes to retain an image of the information displayed on the video display terminal.” Nor does the Office Action identify “a controller coupled to said memory and said converter.”

In addition, the Edgard citation does not disclose a memory that “contains a series of image frames that can be used by an operator to determine the cause of a system failure.” The Edgard citation does not mention a system failure, nor an operator being able to determine the cause of a system failure. In fact, the Edgard citation does not disclose “memory [that] contains a series of image frames.” As stated above, the Edgard citation discloses part of the process for reading characters from the memory. The concept of multiple image frames is not contemplated by the Edgard citation.

The anticipation rejection of claim 200 should be withdrawn for each of the above reasons.

8. Claim 201

Dependent claim 201 recites:

201. The system according to claim 195, further comprising:
 - a trainer coupled to said character determiner for generating a predetermined character display and for storing said digital codes generated by said character determiner representative of each character on said predetermined display; and

a comparator communicating with said trainer and said character determiner for comparing said digital codes generated for an unknown display on said video display terminal with said digital codes representative of each character on said predetermined display, whereby the identity of each character displayed on said unknown display can be determined.

The Office Action alleges that Edgard's column 10, lines 19-54, discloses the subject matter of claim 201. Edgard's column 10, lines 19-54, describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. The Edgard citation does not disclose "a trainer coupled to said character determiner for generating a predetermined character display and for storing said digital codes generated by said character determiner representative of each character on said predetermined display; and a comparator communicating with said trainer and said character determiner for comparing said digital codes generated for an unknown display on said video display terminal with said digital codes representative of each character on said predetermined display, whereby the identity of each character displayed on said unknown display can be determined." The Edgard citation does not contemplate either a "trainer," nor a "comparator communicating with said trainer and said character determiner" These elements are simply missing from the Edgard citation.

The anticipation rejection of claim 201 should be withdrawn for each of the above reasons.

9. Claim 202

Dependent claim 202 recites:

202. The system according to claim 195, further comprising a synchronization signal input circuit for receiving from the data processing device a horizontal synchronization signal, and a pixel clock generator connected with said synchronization signal input circuit and said converter for generating a pixel clock signal,

wherein said data processing device is a personal computer, and said video raster signal input circuit comprises a circuit interconnected between said personal computer and the video display terminal.

The Office Action cites Edgard's column 2, lines 43-64, as disclosing the elements of claim 202. But the Edgard citation merely describes aspects of how the computer writes information to, and reads information from the computer's video memory. The cited portion of Edgard does not disclose any of the elements of claim 202 including a system "further comprising a synchronization signal input circuit for receiving from the data processing device a horizontal synchronization signal, and a pixel clock generator connected with said synchronization signal input circuit and said converter for generating a pixel clock signal, wherein said data processing device is a personal computer, and said video raster signal input circuit comprises a circuit interconnected between said personal computer and the video display terminal." The Edgard citation makes no mention of these elements.

The anticipation rejection of claim 202 should be withdrawn for each of the above reasons.

10. Claim 203

Dependent claim 203 recites:

203. The system according to claim 195, wherein the data processing device is a personal computer, wherein the video raster signal input circuit is coupled to said personal computer for receiving a video raster signal and a horizontal synchronization signal from said personal computer, and wherein the system further comprises:

a video signal output circuit coupled to said video display terminal and said video signal input circuit for supplying said video raster signal and said horizontal synchronization signal to said video display terminal;

a host site command input circuit located with said personal computer for receiving commands from a host site user to be processed by said personal computer;

a command output circuit coupled to said local command input circuit and with a standard keyboard interface of said personal computer for supplying commands to be processed by said personal computer to said standard keyboard interface of said personal computer;

a transmitter coupled to said converter and said command output circuit for transmitting said digital signal to a remote location and for transmitting commands received from said remote location to said command output circuit;

a remote command input circuit at said remote location coupled to said transmitter for receiving commands to be transmitted to and executed by said personal computer; and

a remote video display for receiving said digital signals representative of the information contained in said video raster signal and for displaying said signals to allow a user at said remote location to view the information displayed on said video display terminal coupled to said personal computer,

wherein the converter comprises a pixel clock generator for generating a pixel clock signal;

whereby computer service personnel at the remote location can determine the present operating status of the file server, determine repair action to be taken if necessary, and initiate said repair action by transmitting commands to be executed by said personal computer to said personal computer.

Dependent claim 203 adds a whole host of elements to the system recited in dependent claim 195, which itself adds elements to the system recited in independent claim 194. The Office Action alleges that Edgard's column 10, lines 19-54, and column 2, lines 43-64, disclose all aspects of claim 203. But the column 2 citation describes aspects of how the computer writes information to, and reads information from the computer's video memory. The column 10 citation describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. Neither section, however, discloses the elements of claim 203 including a "video raster signal input circuit is coupled to said personal computer for receiving a video raster signal and a horizontal synchronization signal from said personal computer," "a video signal output circuit

coupled to said video display terminal and said video signal input circuit,” “a host site command input circuit,” “a command output circuit coupled to said local command input circuit,” “a transmitter coupled to said converter and said command output circuit,” “a remote command input circuit at said remote location coupled to said transmitter,” “wherein the converter comprises a pixel clock generator,” and “whereby computer service personnel at the remote location can determine the present operating status of the file server, determine repair action to be taken if necessary, and initiate said repair action by transmitting commands to be executed by said personal computer to said personal computer.” These elements and aspects of claim 203 are not disclosed in the Edgard citation.

The anticipation rejection of claim 203 should be withdrawn for each of the above reasons.

11. Claim 204

Independent claim 204 recites:

204. A method of converting the information contained in a video raster signal generated by a data processing device and displayed on a video display terminal associated with the data processing device, into a digital representation of that information for monitoring the information, the method comprising:

receiving the video raster signal; and

converting the video raster signal into a digital signal representative of the information contained in the video raster signal independently from the data processing device.

The Office Action alleges that Edgard’s column 2, lines 43-64, discloses the subject matter of claim 204. But the Edgard citation merely describes aspects of how the computer writes information to, and reads information from the computer’s video memory. The cited portion of Edgard does not disclose “converting the information contained in a video raster

signal generated by a data processing device and displayed on a video display terminal associated with the data processing device, into a digital representation of that information for monitoring the information.”

Indeed, the Edgard citation does not disclose the use or manipulation of a “video raster signal.” Edgard’s column 2 citation describes the content of video memory, which is digital. Claim 204’s reference to a video raster signal refers to the video signal output from a computer that would normally be used to drive a video monitor. The digital content of a video memory is converted by video driving circuitry into the signal used to actually display an image on a video monitor – *i.e.*, the video raster signal.

Edgard’s column 2 citation does not disclose “converting the video raster signal into a digital signal representative of the information contained in the video raster signal independently from the data processing device.” No such conversion is contemplated by the Edgard column 2 citation.

The anticipation rejection of claim 204 should be withdrawn for each of the above reasons.

12. Claim 205

Dependent claim 205 recites:

205. The method according to claim 204, wherein said converting step includes the steps of determining the identity of each character displayed on the video display terminal and generating a digital code indicative of the identity of said each character displayed on the video display terminal, wherein said step of generating a digital code comprises the step of generating a series of cyclic redundancy checks from the pixel information associated with each character location on the video display terminal.

The Office Action cites Edgard’s column 10, lines 19-54, as allegedly disclosing the subject matter of claim 205. Edgard’s column 10, lines 19-54, describes aspects of the read

character sequence depicted in Figures 7A, 7B, and 7C. This portion of Edgard relates to how the information stored in video RAM 52 is read and what the information represents. The Edgard citation does not disclose a method in which the “converting step” recited in claim 204 includes “determining the identity of each character displayed on the video display terminal and generating a digital code indicative of the identity of said each character displayed on the video display terminal.” Moreover, the Edgard citation does not disclose a method “wherein said step of generating a digital code comprises the step of generating a series of cyclic redundancy checks from the pixel information associated with each character location on the video display terminal.”

The anticipation rejection of claim 205 should be withdrawn for each of the above reasons.

13. Claim 206

Dependent claim 206 recites:

206. The method according to claim 205, further comprising the step of transmitting said digital codes to a remote location.

The Office Action cites Edgard’s column 4, lines 51-67, as allegedly disclosing the claimed method “further comprising the step of transmitting said digital codes to a remote location.” The Edgard citation describes aspects of the signal flow within or relating to ASIC 50. But the Edgard citation does not describe transmission of any data or code to a remote location.

The anticipation rejection of claim 206 should be withdrawn for each of the above reasons.

14. Claim 207

Dependent claim 207 recites:

207. The method according to claim 206, further comprising the steps of:

receiving said digital codes transmitted to said remote location; and
displaying said digital codes received from said remote location to
create an image sufficiently similar to that shown on the video
display terminal to allow a user to determine the operational status
of the data processing device.

The Office Action alleges that Edgard's column 4, lines 17-23, discloses claim 206. But column 4, lines 17-23, merely states that the video system 36 of Edgard's computer handles the storage and display control functions for information to be displayed on CRT 38. This portion of Edgard simply discloses the particular type of video system used in the Edgard computer. The cited portion of Edgard does not disclose a method including the steps of "receiving said digital codes transmitted to said remote location; and displaying said digital codes received from said remote location to create an image sufficiently similar to that shown on the video display terminal to allow a user to determine the operational status of the data processing device." No remote location is discussed in the Edgard citation. No system is disclosed that allows the creation of an image similar to that shown on the remote video display so that a user can determine the operational status of the data processing device. These concepts are not contemplated in the Edgard citation.

The anticipation rejection of claim 207 should be withdrawn for each of the above reasons.

15. Claim 208

Dependent claim 208 recites:

208. The method according to claim 205, wherein said step of transmitting said digital codes to said remote location is performed in response to a command received from said remote location requesting that said digital codes be transmitted.

The Office Action asserts that the subject matter of claim 208 is disclosed in Edgard's column 4, lines 63-67. That portion of Edgard describes aspects of the signal flow within or relating to ASIC 50. The Edgard citation does not disclose a method including "transmitting said digital codes to said remote location is performed in response to a command received from said remote location requesting that said digital codes be transmitted." The Edgard citation does not relate to the transmission of codes to a remote location, or such transmission in response to a command received from a remote location.

The anticipation rejection of claim 208 should be withdrawn for each of the above reasons.

16. Claim 209

Dependent claim 209 recites:

209. The method according to claim 205, further comprising the steps of:

analyzing a predetermined character sequence displayed on the video display terminal to determine the identity of each character displayed on said video display terminal;

generating a digital code representative of each character in said character sequence displayed on said video display terminal; and

storing said digital codes in a memory, whereby future unknown screen displays can be compared with said digital codes to determine the identity of characters displayed on said future unknown screen displays.

The Office Action alleges that Edgard's column 10, lines 19-54, discloses the subject matter of claim 209. Edgard's column 10, lines 19-54, describes aspects of the read character sequence depicted in Figures 7A, 7B, and 7C. This portion of Edgard relates to how the information stored in video RAM 52 is read and what the information represents. The column 10 citation does not remedy the deficiencies identified with respect to the rejection of claims 205

or 209. As explained above, this portion of Edgard does not disclose the subject matter of claims 205 or 209.

Moreover, the Edgard citation does not disclose a method including “storing said digital codes in a memory, whereby future unknown screen displays can be compared with said digital codes to determine the identity of characters displayed on said future unknown screen displays.” The column 10 citation does not mention the concept of storing any codes so that future unknown screen displays can be compared to the codes to determine the identify of characters displayed on the future screen displays.

The anticipation rejection of claim 209 should be withdrawn for each of the above reasons.

17. Claim 210

Dependent claim 210 recites:

210. The method according to claim 204, further comprising the steps of:

receiving a horizontal synchronization signal from the data processing device; and

generating a pixel clock signal in synchronization with said horizontal synchronization signal, wherein said data processing device is a personal computer, and said video raster signal is intercepted between said personal computer and the video display terminal.

The Office Action alleges that Edgard’s column 2, lines 43-64, discloses the steps of claim 210. This Edgard citation describes aspects of how the computer writes information to, and reads information from the computer’s video memory. The cited portion of Edgard does not disclose a method including “receiving a horizontal synchronization signal from the data processing device,” or “generating a pixel clock signal in synchronization with said horizontal synchronization signal, wherein said data processing device is a personal computer, and said

video raster signal in intercepted between said personal computer and the video display terminal.” Neither synchronization signals nor pixel clock generation are disclosed or implied in Edgard at column 2, lines 43-64, relied upon in the Office Action. Nor is there a discussion related to the interception of a video raster signal between a personal computer and a video display terminal.

The anticipation rejection of claim 210 should be withdrawn for each of the above reasons.

F. Rejection of Claims 123-125, 213-219, and 239 under 35 U.S.C. § 102(b) as being Anticipated by Gurley (US 5,036,315)

The Office Action cites Gurley, US 5,036,315, as allegedly anticipating claims 123-125, 213-219, and 239 under 35 U.S.C. § 102(b). I find that the cited portions of Gurley do not disclose the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. Claims 123-125

Independent claim 123 recites:

123. A computer monitoring system comprising:

plural host computer sites, each host computer site having at least one host computer, the at least one host computer including a host processor, a host input device, and a host display device;

a remote processor situated at a remote site, the remote processor having a remote display device and a remote input device connected thereto;

a network linking the remote site and each of the plural host computer sites, the network facilitating a first connection between a first selected host computer at a first host computer site and the remote site, and during the first connection either:

(a) transmitting screen data from the host display device of the first selected host computer to the remote display device, and

- (b) transmitting input signals from the remote input device to the first selected host computer for controlling the first selected host computer;

an on-screen display process, execution of the on-screen display process at the remote site providing a pop-up screen on the remote display device, the pop-up comprising a menu identifying the host computers at the plural host computer sites, the pop-up screen at least overlaying the video appearing on the remote display device as a result of the first connection; whereupon operation of the remote input device in response to the menu of the pop-up screen causes the remote site to terminate the first connection and to establish a second connection between a second selected host computer and the remote site.

Dependent claim 124 recites:

124. The apparatus of claim 123, wherein the second selected host computer is situated at a second host computer site.

Dependent claim 125 recites:

125. The apparatus of claim 123, wherein at least one of the plural host computer sites comprises a network of host computers.

With respect to claim 123, the Office Action alleges that Gurley's column 22, lines 52-66, discloses "plural host computer sites, each host computer site having at least one host computer, the at least one host computer including a host processor, a host input device, and a host display device." But Gurley citation does not disclose the host computer 10 as having "a host input device" or a "host display device." The cited portion of Gurley merely states that the scheme for display of windowed graphic video information can be applied to multiple asynchronous computers on a single monitor. The Gurley citation does not state that host computer(s) 10 have an "input device" or a "display device."

The Office Action also alleges that column 21, lines 17-21, of Gurley discloses "an on-screen display process, execution of the on-screen display process at the remote site providing a pop-up screen on the remote display device, the pop-up comprising a menu identifying the host

computers at the plural host computer sites, the pop-up screen at least overlaying the video appearing on the remote display device as a result of the first connection; whereupon operation of the remote input device in response to the menu of the pop-up screen causes the remote site to terminate the first connection and to establish a second connection between a second selected host computer and the remote site.” But the cited portion of Gurley does not disclose an “on-screen display process” nor any of the claimed characteristics of the “on-screen display process.” the cited portion of Gurley states that the program running on SWMC 80 opens an “x-window” server, and a window for display controller 30 is dedicated. There is no mention of the claimed “on-screen display process.”

The anticipation rejection of claims 123-125 should be withdrawn for each of the above reasons.

2. Claim 213

Independent claim 213 recites:

213. A circuit module for a computer having in operation therein a remote access engine to communicate between a host server and a remote workstation, including:
 - video buffer circuits to receive, respectively, red, green and blue analog video signals from the host server;
 - sync polarity circuits to receive, respectively, horizontal and vertical sync signals from the host server;
 - analog to digital converters communicating with the video buffer circuits to receive the red, green and blue analog video signals and convert them to digital video signals;
 - a phase locked loop video dot clock circuit communicating with the sync polarity circuits and outputting a dot clock signal;
 - a TTL converter receiving the digital video signals and converting them to a TTL format; and

a video processing circuit, including a cpu and a programmable gate array, connected to the sync polarity circuits, the phase locked loop video dot clock circuit, and the TTL converter to automatically determine a graphics mode of the red, green and blue analog video signals.

The Office Action asserts that Gurley's column 13, lines 11-49, discloses "video buffer circuits to receive, respectively, red, green and blue analog video signals from the host server." This is an incorrect reading of this portion of Gurley. Gurley makes it clear that the display signal from host computer 10 is digital, and is not video. (Gurley, col. 4:50-57). It appears from the specification that RGB video signals 41, 43, 45 are generated in PIM 40 and sent to VIM 90 based on digital information received from host computer 10. (Gurley, col. 13:50-66). Thus, the Gurley citation does not disclose "video buffer circuits" that receive "red, green and blue analog video signals from the host server."

The Office Action also alleges that Gurley's column 16, lines 1-30, discloses "sync polarity circuits to receive, respectively, horizontal and vertical sync signals from the host server." But the references to sync signal 49 in this portion of Gurley refer to the sync signal that is generated in the VIM 90 based on the RGB video signals from SWMC 80 – not from host computer 10. (Gurley, col. 10:62-65). Sync signal 49 is routed to display controller 30 to ensure that the video signals generated from the display controller are synchronized to video signals 71, 73, 75 from PIM 70. (Gurley, col. 10, line 62-col. 11, line 9). Thus, the Gurley citation does not disclose "sync polarity circuits to receive, respectively, horizontal and vertical sync signals from the host server."

The Office Action alleges that Gurley's column 13, lines 11-49, discloses "analog to digital converters communicating with the video buffer circuits to receive the red, green and blue analog video signals and convert them to digital video signals." (Office Action, p. 16). But the cited portion of Gurley does not mention analog to digital converters, much less A/D converters

that communicate with video buffer circuit to convert the analog red, green and blue video signals to digital video signals. This claim element is simply not disclosed in the Gurley citation.

The Office Action alleges that Gurley's column 16, lines 1-30, discloses "a phase locked loop video dot clock circuit communicating with the sync polarity circuits and outputting a dot clock signal." Because the cited portion of Gurley does not disclose "the sync polarity circuits" recited in claim 213, column 16, lines 1-30, does not disclose the claimed "phase locked loop video dot clock circuit."

The Office Action alleges that Gurley's column 16, lines 1-30, discloses "a TTL converter receiving the digital video signals and converting them to a TTL format," and "a video processing circuit, including a cpu and a programmable gate array, connected to the sync polarity circuits, the phase locked loop video dot clock circuit, and the TTL converter to automatically determine a graphics mode of the red, green and blue analog video signals." Neither of these claim elements are disclosed in the cited portion of Gurley. Gurley's column 16, lines 1-30, does not mention a TTL converter at all. The Gurley citation also fails to mention a "video processing circuit" that includes a CPU and a programmable gate array connected to the sync polarity circuits, the phase locked loop video dot clock circuit, and the TTL converter. Moreover, the Gurley citation does not disclose any video processing circuit "to automatically determine a graphics mode of the red, green and blue analog video signals." These aspects of claim 213 are entirely missing from the cited portions of Gurley.

The anticipation rejection of claim 213 should be withdrawn for each of the above reasons.

3. Claim 214

Dependent claim 214 recites:

214. A circuit module according to claim 213, wherein the programmable gate array includes circuitry to determine a video frame rate characteristic of the red, green and blue analog video signals.

Contrary to the Office Action, Gurley's column 16, lines 1-30, does not disclose the subject matter of claim 214. The cited portion of Gurley does not mention a "programmable gate array" much less such an array that "includes circuitry to determine a video frame rate characteristic of the red, green and blue analog video signals."

The anticipation rejection of claim 214 should be withdrawn for each of the above reasons.

4. Claim 215

Dependent claim 215 recites:

215. A circuit module according to claim 213, wherein the graphics mode includes a number of available colors.

Contrary to the Office Action, Gurley's column 17, lines 19-48, does not disclose the subject matter of claim 215. The cited portion of Gurley does not mention a circuit that determines a graphics mode of RGB video signals. Moreover, the Gurley citation does not disclose a graphics mode that includes "a number of available colors."

The anticipation rejection of claim 215 should be withdrawn for each of the above reasons.

5. Claim 216

Dependent claim 216 recites:

216. A circuit module according to claim 213, wherein the graphics mode includes a screen resolution in horizontal pixels per screen by vertical pixels per screen.

Contrary to the Office Action, Gurley's column 16, lines 1-30, does not disclose the subject matter of claim 216. The cited portion of Gurley does not mention a "graphics mode" that "includes a screen resolution in horizontal pixels per screen by vertical pixels per screen."

The anticipation rejection of claim 216 should be withdrawn for each of the above reasons.

6. Claim 217

Dependent claim 217 recites:

217. A circuit module according to claim 213, wherein the graphics mode includes a table characterizing a number of available colors versus a screen resolution in horizontal pixels per screen by vertical pixels per screen.

Contrary to the Office Action, Gurley's column 17, lines 19-48, does not disclose the subject matter of claim 217. The cited portion of Gurley does not mention a "graphics mode" that "includes a table characterizing a number of available colors versus a screen resolution in horizontal pixels per screen by vertical pixels per screen."

The anticipation rejection of claim 217 should be withdrawn for each of the above reasons.

7. Claim 218

Dependent claim 218 recites:

218. A circuit module according to claim 213, wherein the video processing circuit includes memory to store a set of predefined video graphics mode characteristics, and wherein the video processing circuit further divides the red, green and blue analog video signals into one or more video screen segment parts and compares the video screen segment parts to the stored predefined video graphics mode characteristics.

Contrary to the Office Action, Gurley's column 17, lines 19-48, does not disclose the subject matter of claim 218. The cited portion of Gurley does not mention a "video processing circuit" that "includes memory to store a set of predefined video graphics mode characteristics." The cited portion of Gurley describes aspects of VIM 90 of Figure 5 including the video switch that selects inputs for display on the monitor 100. The Gurley citation does not mention a memory that stores predefined video graphics mode characteristics.

Moreover, the Gurley citation does not disclose a "the video processing circuit" that "divides the red, green and blue analog video signals into one or more video screen segment parts and compares the video screen segment parts to the stored predefined video graphics mode characteristics." These aspects of claim 218 are not contemplated by the cited portion of Gurley.

The anticipation rejection of claim 218 should be withdrawn for each of the above reasons.

8. Claim 219

Dependent claim 219 recites:

219. A circuit module according to claim 218, wherein the video processing circuit includes a video checksum manager for storing and managing checksums associated with each video screen segment part.

Contrary to the Office Action, Gurley's column 16, lines 31-63, does not disclose the subject matter of claim 219. The cited portion of Gurley describes aspects of the sync/window daughterboard 370, including that the sync signal 149 is used for the readout of data from the frame buffer 350 to circuit 360. The Gurley citation does not mention "a video checksum manager," nor a video checksum manager "for storing and managing checksums associated with each video screen segment part." These aspects of claim 219 are not disclosed in the Gurley citation.

The anticipation rejection of claim 219 should be withdrawn for each of the above reasons.

9. Claim 239

Independent claim 239 recites:

239. A circuit for communicating RGB video information from a Host computer to a remote computer via a network link, comprising:
 - video input circuitry to receive the RGB video information from the Host computer;
 - video processing circuitry to digitize the RGB video information and to decode a video format of the RGB video information received by the video input circuitry; and
 - a flash palette converter circuit, including:
 - an address mux receiving the digitized RGB video information as a stream of digital RGB pixel data;
 - a flash palette converter RAM being addressed by the stream of digital RGB pixel data and outputting for each RGB pixel a palette index byte corresponding to a color value of said RGB pixel.

The Office Action alleges that Gurley's column 16, lines 31-63, discloses all elements of claim 239. The cited portion of Gurley describes aspects of the sync/window daughterboard 370, including that the sync signal 149 is used for the readout of data from the frame buffer 350 to circuit 360. The cited portion of Gurley does not disclose several of the aspects of claim 239. For example, Gurley does not disclose the communication of "RGB video information from a Host computer to a remote computer via a network link." In Gurley, the video data from the host computer is converted and sent to the VIM 90 for display on monitor 100. The host video data is not sent to SWMC 80.

The Gurley citation does not disclose "video processing circuitry to digitize the RGB video information and to decode a video format of the RGB video information received by the

video input circuitry.” The video information from the host computer is already in a digital form when it is output by the host computer 10. (Gurley, col. 4:50-59; col. 10:36-40). Thus, there is no circuit in the Gurley citation that digitizes the host computer’s video information. Moreover, the Gurley citation does not disclose any circuit that “decode[s] a video format of the RGB video information received by the video input circuitry.”

The Gurley citation does not disclose “a flash palette converter circuit,” much less a flash palette converter circuit including “an address mux receiving the digitized RGB video information as a stream of digital RGB pixel data” and “a flash palette converter RAM being addressed by the stream of digital RGB pixel data and outputting for each RGB pixel a palette index byte corresponding to a color value of said RGB pixel.” The Gurley citation does not mention “an address mux” or a “flash palette converter RAM” for any purpose. Thus, these elements of claim 239 are not disclosed in the cited portion of Gurley.

The anticipation rejection of claim 239 should be withdrawn for each of the above reasons.

G. Rejection of Claim 193 under 35 U.S.C. § 102(b) as being Anticipated by Moore (US 5,287,461)

The Office Action cites Moore, US 5,287,461, as allegedly anticipating claim 193 under 35 U.S.C. § 102(b). I find that the cited portions of Moore do not disclose the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

Independent claim 193 recites:

193. A system, comprising:
 - a hardware host unit coupled to a host computer different from the hardware host unit; and

a remote computer software utility, located at a remote site computer, comprising:

a connection utility to establish a communication session with the host unit over a communication link; and

a pop up menu utility providing at least a user choice at the remote site computer to obtain access to the host computer via the connection utility.

The Office Action alleges that Moore's column 5, lines 11-34, discloses all elements of claim 193. But, at a minimum, the Moore citation does not disclose "a remote computer software utility, located at a remote site computer" including "a pop up menu utility providing at least a user choice at the remote site computer to obtain access to the host computer via the connection utility." Presumably, the Office Action alleges that the access server 100 corresponds to the "hardware host unit" and the remote access terminal 79 corresponds to the "remote site computer" recited in claim 193. The "serial port access program" referred to in the Moore citation is a program operating on access server 100. Thus, the "serial port access program" cannot correspond to the claimed "pop up menu utility," and thus, does not disclose the "remote computer software utility" recited in claim 193.

The anticipation rejection of claim 193 should be withdrawn for each of the above reasons.

H. Rejection of Claims 140, 145-151, and 169-183 under 35 U.S.C. § 103(a) as being Obvious by Gurley (US 5,036,315) in view of Sheets (US 4,513,373)

The Office Action rejects claims 140, 145-151, and 169-183 under 35 U.S.C. § 103(a) as being unpatentable over Gurley (US 5,036,315) in view of Sheets (US 4,513,373). I find that the cited combination of Gurley in view of Sheets does not teach or suggest the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. The Office Action has not Identified Evidence Supporting Its Combination of Gurley and Sheets for Claims 140 and 145-151

The Office Action has not provided a proper explanation for why one skilled in the art would have combined Gurley and Sheets. The Office Action states that Gurley discloses a video synchronization technique on a network, and Sheets discloses a basic LAN setup. (Office Action, p. 18). The Office Action then concludes that it would have been obvious to combine the cited portions of Gurley and Sheets “because Gurley specifically stated that a networked computer system could be used in implementation.” (Office Action, p. 18).

First, if Gurley were combined with Sheets’ network 10 (which is the entire system shown in Sheets’ Figure), it is unclear what portions of Gurley would remain since Sheets purports to disclose an entire, operable, and fully functional network that allegedly solves the stated problem of providing a local area network which can provide communication between a plurality of dissimilar terminals and can communicate with computer systems using incompatible formats. (Sheets, col. 1:34-38). Gurley, on the other hand, was attempting to solve a problem of displaying video information derived from multiple computers on windows of a single monitor. (Gurley, col. 3:66-co. 4:10). The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Sheets or Gurley that would have prompted that person to combine the teachings of Sheets with Gurley (or vice versa). Even if both references disclose or suggest the use of a network, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Gurley or Sheets the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Gurley and Sheets. For example, Gurley’s DSCC 20, DC 30, PIM 40, VIM 90, and PIM 81 are described as essential for

implementing the system described in Gurley. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet. Sheets describes the “stations 14 and 16, terminals 18, 20, 22 and 24, port selector 12, protocol converters 30, 32, 34, 36, modem sharing device 38, modems 40, 44, front end communications controller 50, and computer 52 as being required elements of the Sheets system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet. Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Sheets with Gurley to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Sheets with Gurley, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Because Gurley cannot be properly combined with Sheets, as alleged in the Office Action, I find that the Office Action has failed to establish that claims 140 and 145-151 are obvious based on the Gurley/Sheets combination.

2. Claim 140

Dependent claim 140 recites:

140. The system of claim 136, wherein the computer processor includes a computer keyboard port and a computer video device port, the computer access interface including a dedicated link to the keyboard port for transmitting the keyboard signals to the computer processor and including another dedicated link to the video device port for receiving the analog video signals from the computer processor.

Claim 140 depends from independent claim 136. In rejecting claim 136, the Office Action appeared to allege that all elements of the claim were disclosed by Sheets’ port selector

12 or the stations/terminals 14, 16, 18, 20, 22, and 24. (Office Action, pp. 2-3). Yet, in rejecting dependent claim 140, the Office Action alleges that “the computer processor” of claim 136 is disclosed by Gurley at column 9, lines 31-63. (Office Action, p. 18). These two assertions are inconsistent. Either the cited portions of Sheets disclose the “computer processor” of both claims, or the cited portions of Gurley disclose the “computer processor” of both claims.

Similarly, for claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 140, the Office Action alleges that the “computer access interface” is found in column 9, lines 31-63, of Gurley. (Office Action, p. 18). Once again, the Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer processor” and the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 140, the Office Action has not clearly indicated what part of Gurley described in column 9, lines 31-63, corresponds to the “computer processor” and “computer access interface” of dependent claim 140. (Office Action, p. 18). The cited portion of Gurley refers to several different components of the Gurley system including, for example, SWMC 80, mouse-keyboard-and/or-optional input devices 60, HC 10, optional-mouse-dials-function-keys-keyboard-data-tablet 50, DC 30, DSCC 20, control signals 31, 33, and monitor console 100. It is not possible to determine with any degree of certainty which of those elements allegedly correspond to the “computer processor” and “computer access interface” of dependent claim 140. Nevertheless, the Gurley citation does not teach or suggest “the computer processor”

and “the computer access interface” recited in claims 140 and 136. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 140.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 140.

3. Claim 145

Dependent claim 145 recites:

145. The system of claim 136, wherein the computer access interface further receives computer mouse commands from the computer processor and transmits the mouse commands on the non-dedicated serial channel to the remote access facility.

Claim 145 depends from independent claim 136. For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 145, the Office Action alleges that the “computer access interface” is found in column 9, lines 31-42, of Gurley. (Office Action, p. 18). The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 145, the Office Action has not clearly indicated what part of Gurley described in column 9, lines 31-42, corresponds to the “computer access interface” of dependent claim 145. (Office Action, p. 18). The cited portion of Gurley refers to several different components of the Gurley system including, for example, SWMC 80, mouse-keyboard-and/or-optional input devices 60, HC 10, optional-mouse-dials-function-keys-keyboard-data-tablet 50, DC 30, DSCC 20, and control signals 31, 33. It is not possible to determine with any degree of certainty which of those elements allegedly correspond to the

“computer access interface” of dependent claim 145. Nevertheless, the Gurley citation does not teach or suggest “the computer access interface” recited in claims 145 and 136. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 145.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 145.

4. Claim 146

Dependent claim 146 recites:

146. The system of claim 136, wherein the computer access interface determines changes in the analog video signals and produces the digitized version of the analog video signals in accordance with the changes.

Claim 146 depends from independent claim 136. For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 146, the Office Action alleges that the “computer access interface” is found in column 22, lines 52-67, of Gurley. (Office Action, p. 18). The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 146, the cited portion of Gurley is not pertinent to the subject matter recited in claim 146. The column 22 citation to Gurley simply states that the preceding portions of Gurley disclosed a generalized system for interleaved windowed graphics video information from asynchronous computers on a single monitor. The Gurley citation does not teach or suggest any device that “determines changes in the analog video signals and produces the digitized version of the analog video signals in accordance with the changes,” much

less “the computer access interface” that “determines changes in the analog video signals and produces the digitized version of the analog video signals in accordance with the changes.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 146.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 146.

5. Claim 147

Dependent claim 147 recites:

147. The system of claim 136, wherein the computer access interface analyzes characteristics of the analog video signals and produces the digitized version of the analog video signals in accordance with results of said analysis of the analog video signal characteristics.

Claim 147 depends from independent claim 136. For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17, lines 19-54, of Gurley. (Office Action, p. 19). The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 147, the cited portion of Gurley is not pertinent to the subject matter recited in claim 147. The Gurley citation describes the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest any device that “analyzes characteristics of the analog video signals and produces the digitized version of the analog video signals in accordance with results of said

analysis of the analog video signal characteristics,” much less “the computer access interface” that “analyzes characteristics of the analog video signals and produces the digitized version of the analog video signals in accordance with results of said analysis of the analog video signal characteristics.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 147.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 147.

6. Claim 148

Dependent claim 148 recites:

148. The system of claim 147, wherein the analog video signals include RGB information including RGB components and wherein the computer access interface produces the digitized version of the analog video signals by applying a digitization process to each RGB component of the RGB information.

Claim 148 depends from dependent claim 147, which depends from independent claim 136. For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17, lines 19-54, of Gurley. (Office Action, p. 19). For claim 148, the Office Action alleges that the “analog video signals” analyzed by the “computer access interface” of claim 147 are disclosed in Gurley’s column 17, lines 19-54. The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 148, the cited portion of Gurley is not pertinent to the subject matter recited in claim 148. The Gurley citation describes the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest any device that “produces the digitized version of the analog video signals by applying a digitization process to each RGB component of the RGB information,” much less “the computer access interface” that “produces the digitized version of the analog video signals by applying a digitization process to each RGB component of the RGB information.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 148.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 148.

7. Claim 149

Dependent claim 149 recites:

149. The system of claim 148, wherein the digitization process includes analyzing phase characteristics of each RGB component.

Claim 149 depends from dependent claim 148, which depends from dependent claim 147, which further depends from independent claim 136. For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17, lines 19-54, of Gurley. (Office Action, p. 19). For claim 148, the Office Action alleges that the “analog video signals” analyzed by the “computer access interface” of claim 147 are disclosed in Gurley’s column 17, lines 19-54. For claim 149, the Office Action alleges that the “digitization process” is also disclosed in Gurley’s column 17, lines 19-54. The Office Action is reading the references inconsistently. Either Gurley or Sheets

discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 149, the cited portion of Gurley is not pertinent to the subject matter recited in claim 149. The Gurley citation describes the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest a “digitization process [that] includes analyzing phase characteristics of each RGB component.” The VIM 90 does not analyze the video signals passing through it as required by claim 149. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 149.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 149.

8. Claim 150

Dependent claim 150 recites:

150. The system of claim 148, wherein the digitization process includes analyzing amplitude characteristics of each RGB component.

Claim 150 depends from dependent claim 148, which depends from dependent claim 147, which further depends from independent claim 136. For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 147, the Office Action alleges that the “computer access interface” is found in column 17, lines 19-54, of Gurley. (Office Action, p. 19). For claim 148, the Office Action alleges that the “analog video signals” analyzed by the “computer access interface” of claim 147 are disclosed in Gurley’s column 17, lines 19-54. For claim 150, the

Office Action alleges that the “digitization process” is also disclosed in Gurley’s column 17, lines 19-54. The Office Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 150, the cited portion of Gurley is not pertinent to the subject matter recited in claim 150. The Gurley citation describes the VIM 90 as a two-by-one, high speed video switch, and explains its components and their functions. The Gurley citation does not teach or suggest a “digitization process [that] includes analyzing amplitude characteristics of each RGB component.” The VIM 90 does not analyze the video signals passing through it as required by claim 150. Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 150.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 150.

9. Claim 151

Dependent claim 151 recites:

151. The system of claim 136, wherein the computer access interface includes hardware defining at least a local video port and wherein the computer access interface supports a video pass-thru mode for continuously applying the video signal to the local video port of the computer access interface.

Claim 151 depends from independent claim 136. For claim 136, the Office Action alleged that the “computer access interface” corresponded to Sheets’ ASCII terminals 22 and 24. (Office Action, pp. 2-3). But for claim 151, the Office Action alleges that the “computer access interface” is found in column 22, lines 52-67, of Gurley. (Office Action, p. 19). The Office

Action is reading the references inconsistently. Either Gurley or Sheets discloses the “computer access interface.” But the Office Action cannot allege that one reference discloses a claim element, but in the dependent claim allege that a second reference discloses that same claim element.

In addition, with respect to claim 151, the cited portion of Gurley is not pertinent to the subject matter recited in claim 151. The column 22 citation to Gurley simply states that the preceding portions of Gurley disclosed a generalized system for interleaved windowed graphics video information from asynchronous computers on a single monitor. The Gurley citation does not teach or suggest a “computer access interface [that] includes hardware defining at least a local video port and wherein the computer access interface supports a video pass-thru mode for continuously applying the video signal to the local video port of the computer access interface.” Thus, the Office Action has failed to identify substantial evidence supporting its rejection of claim 151.

As a result, even the cited “combination” of Gurley and Sheets fails to teach or suggest the subject matter of claim 151.

10. The Office Action has not Identified Evidence Supporting Its Combination of Gurley and Sheets for Claims 169-183

The Office Action has not provided a proper explanation for why one skilled in the art would have combined Gurley and Sheets for claims 169-183. The Office Action states that Gurley discloses a video synchronization technique on a network, and Sheets discloses a basic LAN setup. (Office Action, p. 19). The Office Action then concludes that it would have been obvious to combine the cited portions of Gurley and Sheets “because Gurley specifically stated that a networked computer system could be used in implementation.” (Office Action, p. 19).

First, if Gurley were combined with Sheets' network 10 (which is the entire system shown in Sheets' Figure), it is unclear what portions of Gurley would remain since Sheets purports to disclose an entire, operable, and fully functional network that allegedly solves the stated problem of providing a local area network which can provide communication between a plurality of dissimilar terminals and can communicate with computer systems using incompatible formats. (Sheets, col. 1:34-38). Gurley, on the other hand, was attempting to solve a problem of displaying video information derived from multiple computers on windows of a single monitor. (Gurley, col. 3:66-co. 4:10). The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Sheets or Gurley that would have prompted that person to combine the teachings of Sheets with Gurley (or vice versa). Even if both references disclose or suggest the use of a network, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Gurley or Sheets the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Gurley and Sheets. For example, Gurley's DSCC 20, DC 30, PIM 40, VIM 90, and PIM 81 are described as essential for implementing the system described in Gurley. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet. Sheets describes the "stations 14 and 16, terminals 18, 20, 22 and 24, port selector 12, protocol converters 30, 32, 34, 36, modem sharing device 38, modems 40, 44, front end communications controller 50, and computer 52 as being required elements of the Sheets system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Sheet.

Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Sheets with Gurley to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Sheets with Gurley, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Because Gurley cannot be properly combined with Sheets, as alleged in the Office Action, I find that the Office Action has failed to establish that claims 169-183 are obvious based on the Gurley/Sheets combination.

11. Claim 169

Independent claim 169 recites:

169. A system for controlling a target computer from a remote workstation of the type that includes a keyboard, a mouse, and a monitor, comprising:
 - a host processor and associated video memory and keyboard/mouse buffers;
 - a video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory;
 - a keyboard/mouse interface that receives keyboard and mouse signals from the remote workstation and stores them in the keyboard/mouse buffers; and
 - the host processor operating a remote access and control program that transmits the contents of the video memory to the remote workstation and receives the contents of the keyboard/mouse buffers from the remote workstation, both over a communication link.

Dependent claim 173 recites:

173. The system of claim 169, wherein the communication link is a logical data path.

Dependent claim 174 recites:

174. The system of claim 169, wherein the communication link is a network.

The Office Action states that claim 169 is rejected based on a combination of Gurley and Sheets. (Office Action, p. 18). But in applying the references to claim 169, the Office Action only cited to Gurley. No mention is made of Sheets and what application, if any, the Office Action makes of Sheets. Thus, because only a single reference is used in the Office Action, I assume that the claim is being rejected as being anticipated by Gurley.

Claim 169 recites a “system for controlling a target computer from a remote workstation.” But the Office Action has not identified what portions of Gurley correspond to the “target computer” and what portions correspond to the “remote workstation.” Thus, the Office Action has not established that Gurley (or Sheets) discloses the system recited in claim 169.

The Office Action alleges that Gurley’s column 9, lines 6-42, discloses the “host processor and associated video memory and keyboard/mouse buffers.” Although the Office Action does not expressly identify the specific portion of Gurley that corresponds to the “host processor,” the cited portion of Gurley generally relates to the SWMC 80 and its peripherals.

The Office Action alleges that Gurley’s column 17, lines 19-54, discloses the “video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory.” (Office Action, p. 20). The cited portion of Gurley describes the VIM 90 shown in Figure 5. The Gurley citation describes the VIM 90 as a real-time, two-by-one, high speed video switch, and explains its components and their functions. There is no “video digitizer” or “video memory” disclosed in the cited portion of Gurley, much less a “video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory.”

The Office Action alleges that Gurley's column 20, lines 29-42, discloses "a keyboard/mouse interface that receives keyboard and mouse signals from the remote workstation and stores them in the keyboard/mouse buffers." (Office Action, p. 20). The cited portion of Gurley relates to the software running in the DC 30. The Gurley citation states that the microprocessor in DC 30 receives data from the mouse and keyboard devices 60 from SWMC 80. Since claim 169 requires the keyboard and mouse signals to be received from the remote workstation, the Office Action implies that SWMC 80 corresponds to the remote workstation. That implies that host computer 10 corresponds to the target computer of claim 169.

The Office Action alleges that Gurley's column 9, lines 43-67, discloses "the host processor operating a remote access and control program that transmits the contents of the video memory to the remote workstation and receives the contents of the keyboard/mouse buffers from the remote workstation, both over a communication link." The cited portion of Gurley generally describes allowing data from the keyboard and mouse devices associated with SWMC 80 to be sent to host computer 10. This data is transmitted according to an application program operating on SWMC 80.

The SWMC 80 cannot correspond to the "host processor" because SWMC 80 does not "transmit the contents of the video memory to the remote workstation." According to the Office Action, SWMC 80 is the "remote workstation." (See discussion of preceding claim element.). Thus, under the examiner's view of the art, SWMC 80 transmits the contents of the video memory to itself. This is an incorrect reading of the claims. Moreover, the cited portion of Gurley does not describe the SWMC transmitting the contents of video memory to itself. Additionally, the video data stored by the "video digitizer" into the video memory, and then transmitted by host processor, must be video data generated from analog video signals "from the

target computer,” i.e., the host computer 10. But, as explained above, there is no “video digitizer” in the cited portions of Gurley.

Similarly, the cited portion of Gurley does not disclose a host processor that “receives the contents of the keyboard/mouse buffers from the remote workstation, both over a communication link.” Again, under the examiner’s view of the references, the SWMC 80 is the “remote workstation.” Thus, by citing a portion of Gurley describing the operation of the SWMC 80, the Office Action is asserting that SWMC 80 “receives the contents of the keyboard/mouse buffers from the remote workstation,” i.e., the SWMC 80 receives the data from itself. This is an incorrect reading of the claims. Moreover, the cited portion of Gurley does not describe SWMC 80 receiving the contents of keyboard/mouse buffers from itself.

The rejection of claim 169 is incorrect. Claim 169 is patentable over the cited reference for at least the reasons provided above. Dependent claims 173 and 174 are patentable over the cited reference for at least the reasons provided above for claim 169.

12. Claim 170

Dependent claim 170 recites:

170. The system of claim 169, wherein the contents of the keyboard/mouse buffers are forwarded to a keyboard and mouse input on the target computer.

The Office Action cites Gurley’s column 12, lines 29-43, as disclosing the subject matter of claim 170. The Gurley citation describes aspects of the display controller 30. This citation states that a microprocessor in the display controller received the data developed by the mouse, keyboard (and other) devices 60 that is transferred from SWMC 80. But the Gurley citation does not describe the transmission of keyboard/mouse buffers to host computer 10 – i.e., the alleged “target computer.”

The rejection of claim 170 is incorrect. Claim 170 is patentable over the cited reference for at least the reasons provided above.

13. Claim 172

Dependent claim 172 recites:

172. The system of claim 169, wherein the communication link is a telephone line.

The Office Action asserts that Gurley's column 10, lines 19-45, discloses the subject matter of claim 172. But the cited portion of Gurley does not disclose a "communication link" between the "host processor" and the "remote workstation" being "a telephone line." The Gurley citation refers to "host channel parallel interface cables 11" and "communications link cable(s) 21." But a "telephone line" is not mentioned. Moreover, there is no evidence that a telephone line would satisfy the requirements of the Gurley system. By referring to specific types of parallel and communication cables, Gurley implies that a simple telephone line would not satisfy Gurley's system requirements.

The rejection of claim 172 is incorrect. Claim 172 is patentable over the cited reference for at least the reasons provided above.

14. Claim 175

Dependent claim 175 recites:

175. The system of claim 169, wherein the video digitizer includes a phase lock loop that produces a clocking signal having a frequency substantially equal to the time at which pixel values are transmitted in the video signal and a gating counter that passes the clocking signal to an analog to digital converter that samples the video signal during an active video portion of the video signal.

The Office Action cites Gurley's column 16, lines 1-30, as disclosing the subject matter of claim 175. Column 16, lines 1-30, describes aspects of the display controller 30. But for

claim 169, the Office Action alleged that the “video digitizer” corresponded to VIM 90. Thus, for claim 175, the Office Action inconsistently alleges that the same “video digitizer” corresponds to portions of the display controller 30. The “video digitizer” cannot correspond to one device for claim 169, and a second, different device, for claim 175.

The rejection of claim 175 is incorrect. Claim 175 is patentable over the cited reference for at least the reasons provided above.

15. Claim 176

Dependent claim 176 recites:

176. The system of claim 169, wherein the video digitizer alternatively samples a single color video signal in a frame of video data and stores the samples in the video memory.

The Office Action alleges that Gurley’s column 13, lines 40-66, discloses the subject matter of claim 176. With respect to claim 169, the Office Action alleged that the VIM 90 corresponded to the “video digitizer.” But with claim 176, the Office Action cites a portion of Gurley that generally relates to communication with SWMC 80 and DC 30. Although the VIM is mentioned in the citation, there is no substantial discussion of the VIM apart from the VIM receiving video signals. The current Gurley citation does not disclose a circuit that digitizes video signals, and thus, no “video digitizer” is disclosed in the column 13 citation. Moreover, the Gurley citation does not disclose any circuit (much less a “video digitizer”) that “alternatively samples a single color video signal in a frame of video data and stores the samples in the video memory.” Thus, the cited portion of Gurley does not disclose the subject matter of claim 176.

The rejection of claim 176 is incorrect. Claim 176 is patentable over the cited reference for at least the reasons provided above.

16. Claim 177

Independent claim 177 recites:

177. A video digitizer for receiving analog video signals at a plurality of resolutions and for storing the video signals in a video memory of a host computer comprising:
- a synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal;
 - a microprocessor that determines a clocking rate at which the analog video signal should be sampled from the timing of the vertical and horizontal synchronize signals;
 - a clock signal generator that produces a clock signal at the clocking rate;
 - an analog to digital converter that is controlled by the clock signal to sample the analog video signal, and
 - a bus interface circuit that writes the samples of the analog video signal into the video memory of the host computer.

Claim 177 recites a “video digitizer” for receiving analog video signals at multiple resolutions, and for storing video signals in a video memory of a host computer. The Office Action alleges that Gurley’s column 14, lines 39-51, discloses “a synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal.” (Office Action, p. 21). The cited portion of Gurley relates to the display controller 30, and to the sync/window daughter board 370 in the display controller. The details of the sync/window daughter card are shown in detail in Figure 4. Neither Figure 4, nor the cited portion of Gurley, discloses a “video digitizer” that includes a “synchronize detect circuit that detects vertical and horizontal synchronize signals from an analog video signal.”

The Office Action also alleges that Gurley’s column 16, lines 1-30, discloses “a microprocessor that determines a clocking rate at which the analog video signal should be sampled from the timing of the vertical and horizontal synchronize signals.” The cited portion of

Gurley describes a pixel clock that controls the timing and rate at which data is read from a frame buffer. The Gurley citation does not disclose a microprocessor that determines a clocking rate at which an analog video signal should be sampled as part of a video digitizer.

Gurley's column 16, lines 1-30, is also relied upon as allegedly disclosing "an analog to digital converter that is controlled by the clock signal to sample the analog video signal" and "a bus interface circuit that writes the samples of the analog video signal into the video memory of the host computer." But the cited portion of Gurley does not disclose either of these claim elements. No analog-to-digital converter is disclosed. Moreover, the cited portion does not disclose a "bus interface circuit that writes the samples of the analog video signal into the video memory of the host computer." The cited portion of Gurley describes aspects of the sync/window daughterboard 370 in the display controller 30. This daughtercard is not part of the host computer. Moreover, the output of the daughtercard is not delivered or transmitted to the host computer 10. Instead, the video signals from the display controller are sent to the VIM 90, and then, when appropriate, on to the monitor 100. Thus, the cited portion of Gurley does not disclose the subject matter of claim 177.

The rejection of claim 177 is incorrect. Claim 177 is patentable over the cited reference for at least the reasons provided above.

17. Claim 178

Dependent claim 178 recites:

178. The video digitizer of claim 177, wherein the clock signal generator comprises:
 - a phase lock loop circuit that compares the phase of the horizontal synchronize signal with the phase of a divided clocking signal;
 - a variable oscillator that produces the clocking signal that controls the analog to digital converter, wherein the clocking signal has a

frequency that is dependent on the difference in phase between the horizontal synchronize signal and the divided clocking signal; and

a programmable divider that receives the clocking signal produced by the variable oscillator and produces the divided clocking signal that is fed to the phase lock loop circuit.

The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 178. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a “phase lock loop circuit,” a “variable oscillator,” an “analog to digital converter,” or a “programmable divider.” Other aspects of Gurley state that the daughtercard includes a phase lock loop, but there is no disclosure that the phase lock loop “compares the phase of the horizontal synchronize signal with the phase of a divided clocking signal.” Moreover, none of the other claimed limitations of the “variable oscillator,” the “analog to digital converter,” or the “programmable divider” are disclosed in the cited portion of Gurley. Thus, the cited portion of Gurley does not disclose the subject matter of claim 178.

The rejection of claim 178 is incorrect. Claim 178 is patentable over the cited reference for at least the reasons provided above.

18. Claim 179

Dependent claim 179 recites:

179. The video digitizer of claim 178, further comprising a gating circuit that receives the clocking signal and passes the clocking signal to the analog to digital converter during an active video portion of the analog video portion of the analog video signal.

The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 179. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not mention a video

digitizer including “a gating circuit that receives the clocking signal and passes the clocking signal to the analog to digital converter during an active video portion of the analog video portion of the analog video signal.” No “gating circuit” or “analog to digital converter” are mentioned in the Gurley citation. Moreover, there is no discussion of passing a clocking signal to an analog to digital converter “during an active video portion of the analog video portion of the analog video signal.” These aspects of claim 179 are simply not taught or suggested by the cited portion of Gurley. Thus, the cited portion of Gurley does not disclose the subject matter of claim 179.

The rejection of claim 179 is incorrect. Claim 179 is patentable over the cited reference for at least the reasons provided above.

19. Claim 180

Dependent claim 180 recites:

180. The video digitizer of claim 178, further comprising a phase adjust circuit that adjusts the phase of the clocking signal.

The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 180. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a video digitizer including “a phase adjust circuit that adjusts the phase of the clocking signal.” The cited portion of Gurley does not teach or suggest a “phase adjust circuit” for a clocking signal. Thus, the cited portion of Gurley does not disclose the subject matter of claim 180.

The rejection of claim 180 is incorrect. Claim 180 is patentable over the cited reference for at least the reasons provided above.

20. Claim 181

Dependent claim 181 recites:

181. The video digitizer of claim 177, further comprising a selection circuit that alternatively selects a red, green, and blue component on the analog video signal to be sampled by the analog to digital converter.

The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 181. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not mention a video digitizer including “a selection circuit that alternatively selects a red, green, and blue component on the analog video signal to be sampled by the analog to digital converter.” No “selection circuit” or an “analog to digital converter” are taught or suggested in the cited portion of Gurley. Thus, the cited portion of Gurley does not disclose the subject matter of claim 181.

The rejection of claim 181 is incorrect. Claim 181 is patentable over the cited reference for at least the reasons provided above.

21. Claim 182

Dependent claim 182 recites:

182. The video digitizer of claim 177, wherein the analog to digital converter includes separate analog to digital converters to sample the red, green, and blue components of the analog video signal.

The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 182. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a video digitizer in which an “analog to digital converter includes separate analog to digital converters to sample the red, green, and blue components of the analog video signal.” The cited portion of Gurley does not teach or suggest an “analog to digital converter,” much less the

specific analog to digital converter recited in claim 182. Thus, the cited portion of Gurley does not disclose the subject matter of claim 182.

The rejection of claim 182 is incorrect. Claim 182 is patentable over the cited reference for at least the reasons provided above.

22. Claim 183

Dependent claim 183 recites:

183. The video digitizer of claim 177, wherein the host computer operates a remote access and control program that transmits the contents of the video memory to a remote computer system.

The Office Action alleges that column 16, lines 1-30, of Gurley discloses all elements of dependent claim 183. The cited portion of Gurley describes aspects of the sync/window daughtercard in display controller 30. But the cited portion of Gurley does not even mention a video digitizer or a “host computer [that] operates a remote access and control program that transmits the contents of the video memory to a remote computer system.” No “host computer” or “remote access and control program” are taught or suggested in the cited portion of Gurley. Indeed, in Gurley, video information from the host computer is not sent to “a remote computer system.” Instead, at least some of the video information from host computer 10 is delivered to VIM 10 and displayed on monitor 100. The video information from host computer 10 is not delivered to SWMC 80. Thus, the cited portion of Gurley does not disclose the subject matter of claim 183.

The rejection of claim 183 is incorrect. Claim 183 is patentable over the cited reference for at least the reasons provided above.

I. Rejection of Claims 126-128, and 152-153 under 35 U.S.C. § 103(a) as being rendered Obvious by Gurley (US 5,036,315) in view of Lemon (US 4,674,041)

The Office Action rejects claims 126-128, and 152-153 under 35 U.S.C. § 103(a) as being unpatentable over Gurley (US 5,036,315) in view of Lemon (US 4,674,041). I find that the cited combination of Gurley in view of Lemon does not teach or suggest the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. The Office Action has not Identified Evidence Supporting Its Combination of Gurley and Lemon

The Office Action has not provided a proper explanation for why one skilled in the art would have combined Gurley and Lemon. The Office Action states that Gurley discloses a video synchronization system between host computers.² (Office Action, p. 22). The Office Action also alleges that Lemon discloses a remote rebooting system for networked computers. (Office Action, p. 22). The Office Action then concludes that it would have been obvious to combine the cited portions of Gurley and Lemon “in order to allow for remote control of a locked computer system.” (Office Action, p. 22).

First, if Gurley were combined with Lemon’s system (which is the entire system shown in Lemon’s Figure 2), it is unclear what system would result from that combination. Gurley is directed to the problem of displaying video information derived from multiple computers on windows of a single monitor. (Gurley, col. 3:66-co. 4:10). Lemon is directed to an improved system for distributing coupons for retail sales of merchandise. (Lemon, col. 1:7-12). Lemon discloses a single computer (host unit H) communicating through modems to terminals T that

² Although for other claims, the Office Action has previously alleged that the video synchronization occurs between a host computer (i.e., host computer 10) and a remote computer (i.e., SWMC 80).

print the coupons. Although the terminals are electronic devices, the terminals are not computers and are not described as computers in Lemon. The terminals are just that – terminals that, in certain instances, send data to, and receive commands from, the host computer and print coupons accordingly. The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Lemon or Gurley that would have prompted that person to combine the teachings of Lemon with Gurley (or vice versa). Even if both references disclose or suggest the use of computers, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Gurley or Lemon the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Gurley and Lemon. For example, Gurley's DSCL 20, DC 30, PIM 40, VIM 90, and PIM 81 are described as essential for implementing the system described in Gurley. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Lemon. Lemon describes the host computer H, modem M, and terminals T1-Tn as being required elements of the Lemon system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Gurley with Lemon. Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Lemon with Gurley to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Lemon with Gurley, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Because Gurley cannot be properly combined with Lemon, as alleged in the Office Action, I find that the Office Action has failed to establish that claims 126-128, and 152-153 are obvious based on the Gurley/Lemon combination.

2. Claim 126

Dependent claim 126 recites:

126. The apparatus of claim 125, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers.

The Office Action makes no allegation as to whether the subject matter of claim 126 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 126 does not claim a “remote reboot system.” Thus, the mention in Lemon of sending reboot commands to the terminals to update coupon data is not relevant to whether claim 126 is patentable over Gurley and Lemon.

Moreover, Lemon does not teach or suggest “at least one of the plural host computer sites comprises a daisy chained configuration of host computers,” as recited in claim 126. The Office Action has not specified what part of Lemon corresponds to the alleged “plural host computer site” of claim 126, much less a computer site having “a daisy chained configuration of host computers.” Lemon’s figure 2 does not disclose a “daisy chained configuration” of terminals, much less host computers. Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 126.

The rejection of claim 126 is incorrect. Claim 126 is patentable over the cited references for at least the reasons provided above.

3. Claim 127

Dependent claim 127 recites:

127. The apparatus of claim 125, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for each of the host computers the host unit is connected between the host computer and a source of power for the host computer, and wherein upon receipt of the cold boot command from the remote site the host unit temporarily interrupts power to the host processor of the host computer.

The Office Action makes no allegation as to whether the subject matter of claim 127 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 127 recites subject matter beyond the concept of a “remote rebooting system for networked computers.” For example, the Office Action does not allege that Gurley or Lemon teach or suggest “the plural host computer sites compris[ing] a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for each of the host computers the host unit is connected between the host computer and a source of power for the host computer.” Moreover, Lemon does not teach or suggest a system in which “upon receipt of the cold boot command from the remote site the host unit temporarily interrupts power to the host processor of the host computer.” In the cited portion of Lemon, all that is disclosed is that the terminal T receives a reboot command, and apparently reboots itself. There is no teaching or suggestion that Lemon’s terminals are rebooted in the manner recited in claim 127 – i.e., when a cold boot command is received from the remote site, “the host unit temporarily interrupts power to the host processor of the host computer.”

Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 127.

The rejection of claim 127 is incorrect. Claim 127 is patentable over the cited references for at least the reasons provided above.

4. Claim 128

Dependent claim 128 recites:

128. The apparatus of claim 125, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for at least one of the host computers the host unit is connected between the host processor and at least one of the host input device and the host display device of the at least one of the host computers.

The Office Action makes no allegation as to whether the subject matter of claim 128 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 128 does not recite a “remote reboot system.” Thus, the mention in Lemon of sending reboot commands to the terminals to update coupon data is not relevant to whether claim 126 is patentable over Gurley and Lemon.

Moreover, claim 128 does not teach or suggest a system as recited in claim 125 “wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers.” Lemon does not describe host computers in a daisy chained configuration. Nor does it describe a daisy chain configuration of host computer “including a host unit associated with each of the host computers.” The subject matter of claim 128 is not described or suggested

by Lemon and the Office Action makes no allegation otherwise. Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 128.

The rejection of claim 128 is incorrect. Claim 128 is patentable over the cited references for at least the reasons provided above.

5. Claim 152

Dependent claim 152 recites:

152. The system of claim 136, wherein the computer processor receives AC power and the computer access interface receives a request to break the AC power and then coordinates a break in the AC power to the computer processor.

The Office Action rejects claim 152 as being obvious based on the combination of Gurley in view of Lemon. (Office Action, p. 22). But claim 152 depends from independent claim 136. Claim 136 was rejected because it was allegedly anticipated by Sheets. (Office Action, p. 2). Because the rejection of claim 152 does not mention how or if Sheets applies to that rejection, it appears that the obviousness rejection of claim 152 is improper. For example, the Office Action does not provide evidence of how (or if) one skilled in the art at the time of the invention would have been motivated to combine or modify Sheets with Gurley and/or Lemon. The Office Action fails to describe how one skilled in the art would have chosen to combine the systems of Sheets, Lemon and Gurley. The Office Action does not describe what portions (if any) of the systems described in Sheets, Lemon and Gurley would have been retained in the combination and what portions (if any) would have been eliminated from the combination. In short, it appears that the Office Action has provided no basis supporting a combination based on Sheets, Lemon and Gurley. Moreover, if the rejection of claim 152 is only based on Gurley and Lemon, then the rejection is incomplete for the further reason that the Office Action does not identify what portions of Lemon or Gurley disclose or suggest the elements of claim 136.

In addition, the Office Action makes no allegation as to whether the subject matter of claim 152 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 152 recites subject matter beyond the concept of a “remote rebooting system for networked computers.” For example, the Office Action does not allege that Gurley or Lemon teach or suggest a system “wherein the computer processor receives AC power and the computer access interface receives a request to break the AC power and then coordinates a break in the AC power to the computer processor.” In the cited portion of Lemon, all that is disclosed is that the terminal T receives a reboot command, and apparently reboots itself. There is no teaching or suggestion that Lemon’s terminals are rebooted in the manner recited in claim 152 – i.e., when a “computer access interface receives a request to break the AC power,” it “then coordinates a break in the AC power to the computer processor.” Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 152.

The rejection of claim 152 is incorrect. Claim 152 is patentable over the cited references for at least the reasons provided above.

6. Claim 153

Dependent claim 153 recites:

153. The system of claim 152, further including a power break component receiving the AC power and delivering the AC power to the computer processor, wherein the computer access interface delivers a power break command signal to the power break component upon receipt of the request to break.

The Office Action makes no allegation as to whether the subject matter of claim 153 is taught or suggested by Gurley or by Lemon. The Office Action states that “Gurley failed to

disclose a remote reboot system for a series of daisy chained computers. However, Lemon disclosed a remote rebooting system for networked computers.” (Office Action, p. 22). But claim 153 recites subject matter beyond the concept of a “remote rebooting system for networked computers.” For example, the Office Action does not allege that Gurley or Lemon teach or suggest a system “further including a power break component receiving the AC power and delivering the AC power to the computer processor.” Moreover, Gurley and Lemon are not alleged to teach or suggest a “computer access interface [that] delivers a power break command signal to the power break component upon receipt of the request to break.” In the cited portion of Lemon, all that is disclosed is that the terminal T receives a reboot command, and apparently reboots itself. There is no teaching or suggestion that Lemon’s terminals are rebooted in the manner recited in claim 153 – i.e., with a “power break component” wherein “the computer access interface delivers a power break command signal to the power break component upon receipt of the request to break.” Thus, the cited combination of Gurley and Lemon does not teach or suggest the subject matter of claim 153.

The rejection of claim 153 is incorrect. Claim 153 is patentable over the cited references for at least the reasons provided above.

J. Rejection of Claims 154-156, and 222-226 under 35 U.S.C. § 103(a) as being rendered Obvious by Farrand (US 5,444,849) in view of Sheets (US 4,513,373)

The Office Action rejects claims 154-156, and 222-226 under 35 U.S.C. § 103(a) as being unpatentable over Farrand (US 5,444,849) in view of Sheets (US 4,513,373). I find that the cited combination of Farrand in view of Sheets does not teach or suggest the elements of the rejected claims for at least the reasons provided below. Thus, I conclude that the rejections are incorrect.

1. The Office Action has not Identified Sufficient Evidence Supporting Its Combination of Farrand and Sheets

The Office Action has not provided a proper explanation for why one skilled in the art would have combined Farrand and Sheets. The Office Action states that Farrand discloses a network management system which notified an administrator on the occurrence of various events in the network. (Office Action, p. 22). The Office Action also alleges that Farrand supports reboot of a system. (Office Action, p. 22). The Office Action then concludes that it would have been obvious to combine the cited portions of Farrand and Sheets because it would have been obvious “to use Farrand with the network taught by Sheets since Sheets was a LAN and Farrand was designed for use with a LAN.” (Office Action, p. 22).

First, if Farrand were combined with Sheets’ system (which is the entire system shown in Sheets’ Figure), it is unclear what system would result from that combination. Sheets is directed to allowing computer 52 to communicate through various protocol converters 30, 32, 34, 36 and port selector 12 to the stations and terminals 14, 16, 18, 20, 22, 24. (Sheets, Figure, and col. 2:1-6). Farrand is directed to a system manager for a computer system and in particular to a protocol for asynchronous data transfers between a remote system manager facility and the system manager. (Farrand, col. 1:40-44). The Office Action has identified no evidence why one skilled in the art would have recognized a deficiency in Farrand or Sheets that would have prompted that person to combine the teachings of Farrand with Sheets (or vice versa). Even if both references disclose or suggest the use of computer networks, that fact would not explain why one would modify fully-functional systems that were designed for different purposes.

Moreover, the Office Action has not provided evidence of what portions of Farrand or Sheets the artisan would have retained as part of the combined system assuming (for the sake of argument) that the artisan would have been motivated to combine Farrand and Sheets. For

example, Sheets' stations and terminals 14, 16, 18, 20, 22, 24, the port selector 12, the protocol converters 30, 32, 34, 36, modem sharing device 38, modems 40, 44, front end communications controller 50, and computer 52 are all described as essential for implementing the system of Sheets. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Farrand with Sheets. Farrand describes the EISA server 12, asynchronous link 40 (which may be a telephone connection), network 28, and computer station 30 as required elements of the Farrand system. The Office Action does not provide any evidence of which, if any, of these system elements would have been deleted by the artisan when combining Farrand with Sheets. Nor does the Office Action provide evidence that one skilled in the art would have known how to combine elements of Farrand with Sheets to result in an operative system. Without this evidence, I find that one skilled in the art at the time of the present inventions would not have been motivated to combine Farrand with Sheets, much less make the specific combination of references that the Office Action is apparently making in rejecting the claims.

Additionally, the Office Action provides no evidence of how the Farrand and Sheets systems would be aligned in a combination of the systems. Sheets identifies its network as network 10 – i.e., the entire system shown in the Figure. (Sheets, col. 3, line 15). This type of “network” is entirely different from the networks described for use in Farrand, including Token ring, Ethernet, etc. (Farrand, col. 6:2-5). The Office Action does not identify where one skilled in the art would insert the Farrand EISA server 12, for example, into Sheets’ network 10. Thus, I do not agree that one skilled in the art at the time of the present invention would have been motivated to combine Farrand and Sheets, much less combine those references in a manner that renders the claims obvious.

Because Farrand cannot be properly combined with Sheets, as alleged in the Office Action, I find that the Office Action has not established that claims 154-156, and 222-226 are obvious based on the Farrand/Sheets combination.

2. Claim 154

Dependent claim 154 recites:

154. The system of claim 136, wherein the computer access interface includes a page alert process generating an outgoing phone call to a predefined page number whenever a remote access user of the remote access facility fails to enter an appropriate access code.

With respect to claim 136, the Office Action appeared to allege that the “computer access interface” corresponded to terminals 22 and 24. But for claim 154, the Office Action cites Farrand for the alleged disclosure of “computer access interface” because Farrand allegedly discloses a system that provides alerts to an administrator. Thus, the Office Action is reading the cited references inconsistently. Either Farrand or Sheets must be relied upon for allegedly disclosing the “computer access interface.” The Office Action cannot properly cite Sheets for that disclosure for claim 136, and then rely on Farrand for that alleged disclosure in dependent claim 154.

Giving the Office Action a flexible reading, the Office Action appears to allege that Farrand’s column 10, lines 8-30, and column 12, lines 20-67, disclose the subject matter of claim 154. But nothing in those cited portions of Farrand discloses a system that “generat[es] an outgoing phone call to a predefined page number whenever a remote access user of the remote access facility fails to enter an appropriate access code.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 154.

The rejection of claim 154 is incorrect. Claim 154 is patentable over the cited references for at least the reasons provided above.

3. Claim 155

Dependent claim 155 recites:

155. The system of claim 136, wherein the computer access interface generates a predefined audio signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.

With respect to claim 136, the Office Action appeared to allege that the “computer access interface” corresponded to terminals 22 and 24. But for claim 155, the Office Action cites Farrand for the alleged disclosure of “computer access interface” because Farrand allegedly discloses a system that provides alerts to an administrator. Thus, the Office Action is reading the cited references inconsistently. Either Farrand or Sheets must be relied upon for allegedly disclosing the “computer access interface.” The Office Action cannot properly cite Sheets for that disclosure for claim 136, and then rely on Farrand for that alleged disclosure in dependent claim 155.

Giving the Office Action a flexible reading, the Office Action appears to allege that Farrand’s column 10, lines 8-30, and column 12, lines 20-67, disclose the subject matter of claim 155. But nothing in those cited portions of Farrand discloses a system that “generates a predefined audio signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.” Farrand’s voice synthesis logic 82 does not generate any predefined audio signals “whenever a remote access user establishes communication with the computer access interface via the remote access facility.” Instead, the voice synthesis logic generates audio signals when particular alert conditions exist. Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 155.

The rejection of claim 155 is incorrect. Claim 155 is patentable over the cited references for at least the reasons provided above.

4. Claim 156

Dependent claim 156 recites:

156. The system of claim 136, wherein the computer access interface generates a predefined visual signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.

With respect to claim 136, the Office Action appeared to allege that the “computer access interface” corresponded to terminals 22 and 24. But for claim 156, the Office Action cites Farrand for the alleged disclosure of “computer access interface” because Farrand allegedly discloses a system that provides alerts to an administrator. Thus, the Office Action is reading the cited references inconsistently. Either Farrand or Sheets must be relied upon for allegedly disclosing the “computer access interface.” The Office Action cannot properly cite Sheets for that disclosure for claim 136, and then rely on Farrand for that alleged disclosure in dependent claim 156.

Giving the Office Action a flexible reading, the Office Action appears to allege that Farrand’s column 10, lines 8-30, and column 12, lines 20-67, disclose the subject matter of claim 156. But nothing in those cited portions of Farrand discloses a system that “generates a predefined visual signal whenever a remote access user establishes communication with the computer access interface via the remote access facility.” The Farrand citations do not disclose the generation of a predefined visual signal when a remote user establishes communication with the computer access interface via the remote access facility. At most, the voice synthesis logic 82 generates audio signals when particular alert conditions exist. Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 156.

The rejection of claim 156 is incorrect. Claim 156 is patentable over the cited references for at least the reasons provided above.

5. Claim 222

Independent claim 222 recites:

222. A remote access device to remotely control a host computer and to receive at a remote location a video signal from the host computer, comprising:
 - a remote access engine between the host computer and the remote location to coordinate delivery of data packets along a telecommunications link between the host computer and the remote location; and
 - a remote access controller, including a remote access control card communicating with the telecommunications link, to read a present caller ID associated with the remote location, to store a list of predefined caller IDs, to compare the present caller ID with the list and to disable the remote access engine whenever the present caller ID fails to match any from the list of predefined caller IDs.

The Office Action has not identified where in Farrand or Sheets each of the elements of independent claim 222 are alleged to be taught or suggested. I understand that, at a minimum, a proper rejection must show where each cited reference, alone or in combination with other references, teaches or suggests each element of the rejected claim. Thus, because the Office Action fails to do this, it appears that the rejection of claim 222 (and its dependent claims) is incorrect for at least this reason.

More specifically, the Office Action does not allege that the Farrand/Sheets combination teaches or suggests “a remote access device to remotely control a host computer and to receive at a remote location a video signal from the host computer.” The combination is not alleged to teach or suggest “a remote access engine between the host computer and the remote location to coordinate delivery of data packets along a telecommunications link between the host computer

and the remote location.” Nor is the combination alleged to teach or suggest “a remote access controller, including a remote access control card communicating with the telecommunications link, to read a present caller ID associated with the remote location, to store a list of predefined caller IDs, to compare the present caller ID with the list and to disable the remote access engine whenever the present caller ID fails to match any from the list of predefined caller IDs.” The Office Action alleges that Farrand discloses video and audio alerts to an administrator, but Farrand is not alleged to disclose the elements recited in claim 222. Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 222.

The rejection of claim 222 is incorrect. Claim 222 is patentable over the cited references for at least the reasons provided above.

6. Claim 223

Dependent claim 223 recites:

223. A remote access device according to claim 222, wherein the remote access controller further includes a telephone jack to automatically issue a page alert to a predefined telephone number whenever the present caller ID fails to match any from the list of predefined caller IDs.

Although Farrand is cited to the generation of alerts to an administrator, the cited portions of Farrand do not teach or suggest a system that “automatically issue[s] a page alert to a predefined telephone number whenever the present caller ID fails to match any from the list of predefined caller IDs.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 223.

The rejection of claim 223 is incorrect. Claim 223 is patentable over the cited references for at least the reasons provided above.

7. Claim 224

Dependent claim 224 recites:

224. A remote access device according to claim 222, wherein the remote access controller further resets the host computer wherever the predefined caller ID matches the present caller ID.

The Office Action does not allege that the Farrand/Sheets combination teaches or suggests the subject matter of claim 224. Indeed, the cited portions of Farrand (upon which the Office Action seems to rely most heavily for claims 222-226) do not teach or suggest a system in which “the remote access controller further resets the host computer wherever the predefined caller ID matches the present caller ID.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 224.

The rejection of claim 224 is incorrect. Claim 224 is patentable over the cited references for at least the reasons provided above.

8. Claim 225

Dependent claim 225 recites:

225. A remote access device according to claim 222, wherein the remote access controller further reboots the host computer wherever the predefined caller ID matches the present caller ID.

The Office Action does not allege that the Farrand/Sheets combination teaches or suggests the subject matter of claim 225. Indeed, the cited portions of Farrand (upon which the Office Action seems to rely most heavily for claims 222-226) do not teach or suggest a system in which “the remote access controller further reboots the host computer wherever the predefined caller ID matches the present caller ID.” Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 225.

The rejection of claim 225 is incorrect. Claim 225 is patentable over the cited references for at least the reasons provided above.

9. Claim 226

Dependent claim 226 recites:

226. A remote access device according to claim 222, further including an external modem and a control module providing AC power to the host computer, the external modem communicating with the control module and automatically answering calls received by the external modem on a different telecommunications link, said control module temporarily interrupting power to the host computer whenever said external modem automatically answers a call.

The Office Action does not allege that the Farrand/Sheets combination teaches or suggests the subject matter of claim 226. Indeed, the cited portions of Farrand (upon which the Office Action seems to rely most heavily for claims 222-226) do not teach or suggest a system “further including an external modem and a control module providing AC power to the host computer, the external modem communicating with the control module and automatically answering calls received by the external modem on a different telecommunications link, said control module temporarily interrupting power to the host computer whenever said external modem automatically answers a call.” I do not find a teaching or suggestion of these claim elements in the cited portions of Sheets either. Thus, the cited combination of Farrand and Sheets does not teach or suggest the subject matter of claim 226.

The rejection of claim 226 is incorrect. Claim 226 is patentable over the cited references for at least the reasons provided above.

VI. CONCLUSION

As shown in my Curriculum Vitae, I have previously been retained by counsel for Avocent, the assignee of the ‘212 patent, as a technical expert in patent infringement litigation,

and other clients as referenced in my Curriculum Vitae. My compensation for work performed in those litigations was not contingent on the outcome of the respective case.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: May 7, 2009



Joseph C. McAlexander
Joseph C. McAlexander, III

Exhibit 1

PROFESSIONAL SUMMARY

Currently a Registered Professional Engineer (#79454) and recognized as an inventor on 25 US and a number of foreign patents, I am President of M^EAlexander Sound, Inc., and the Managing Director of M^EAlexander Sound Pte Ltd. I have focused my expertise to support a number of clients in product, process, and operations analysis and investigation. Thirty-six years of experience in microcircuit and semiconductor technologies has developed my skills in areas of circuit design and analysis, device fabrication and assembly, testing, marketing, control system design and analysis, manufacturing operations and respective areas of quality, reliability, and defect / failure analysis. I am a Partner with RMC Management, supporting clients in asset management, and the President and CEO of MDFHoldings, Inc., an IP holding company currently engaged in the field of GPS Tracking. I have:

- designed Dynamic Random Access Memories (DRAMs), Static Random Access Memories (SRAMs), Charge Coupled Devices (CCDs), Shift Registers (SRs), and functional circuits including I/O buffers for address and data, decoders, clocks, sense amplifiers, fault tolerant, parallel-to-serial data paths for video applications, level shifters, converters, pumps, and logic, as well as wireless communication systems and MEMs;
- managed operations including engineering, training, and quality assurance for device fabrication, assembly, test, analysis, and reliability assessment, as well as manufacturing control; testing, analysis, and control involved use of mechanical calibration and measuring equipment, including optical, scanning e-beam, IR, capacitive, and laser using phase contrast and FFT for HAR applications;
- taught courses in solid state device physics, integrated circuit design, integrated circuit fabrication, and statistical control;
- provided expert services, investigating both process and design technologies of various devices (microprocessor and controller, memory, programmable logic, card, tag, module, mixed signal, custom, and other), systems (PC and peripheral, computer, control, laser measurement, switch, architecture, software, and other), and consumer products (medical, TV, telephone, VCR, facsimile, copier, lighting, game, and other); and
- provided nuclear radiation hardness testing services for military and space clients.

From 1986-1990, I was Executive Vice President of EPI Technologies, Inc., prior to joining the staff at Cochran Consulting, Inc. where I served as senior managing consultant from 1991-2002. From 1972 to 1986, I was employed by Texas Instruments Incorporated - two years as the Quality and Reliability Manager for the 256K DRAM wafer fabrication facility, three years as the Engineering/QRA Manager for the TI Singapore test and assembly operation, and nine years in semiconductor design and product engineering management functions.

EXPERIENCE PROFILE

- 2005-present **McAlexander Sound Pte Ltd - Singapore**
Managing Director
o System, Product, and Process investigation, expert witness services for protection of intellectual property;
o Patent portfolio development and valuation;
o Contract consultation.
- 2002-present **MDFHoldings, Inc. – Las Vegas, NV**
CEO
o IP holding and licensing company.
- 1996-present **RMC Management, LLP - Plano, TX**
Partner
o Asset management.
- 1988-present **McAlexander Sound, Inc. (McASI) - Plano, TX**
President
o System, Product, and Process investigation, expert witness services for protection of intellectual property;
o Patent portfolio development and valuation;
o Product liability and insurance claim investigation, expert witness services for matters involving such claims;
o Quality Systems consulting and engineering;
o Radiation Hardness Testing Technical Representative;
o Technical Advisor in High Aspect Ratio and Surface Contour Measurement using Direct-to-Digital Holography.

EXPERIENCE PROFILE (continued)

- 1991-2002 **Cochran Consulting, Inc. (CCI) - Richardson, TX**
Managing Consultant
- o System, Product, and Process investigation, expert witness services for protection of intellectual property;
 - o Design, process, and product reliability;
 - o Defect and failure analysis.
- 1986-Nov'90 **EPI Technologies, Inc. - Richardson, TX**
Executive Vice President and Company Officer
- o Managed Advanced Technology Div., QA, and Engineering;
 - o Developed strategic, space/energy market growth plans;
 - o Negotiated the acquisition of a radiation company;
 - o Designed and managed physical analysis, radiation effects, and environmental stress laboratories, including optical and e-beam measurement;
 - o Achieved > 30% annual revenue growth and profitability for each laboratory the first 12 months;
 - o Product and Process investigation services for protection of intellectual property.
- 1972 – 1986 **Texas Instruments, Inc. - Dallas/Houston, TX; Singapore**
- '84 - '86 **Quality/Reliability Assurance Manager, TI Dallas Advanced DRAM semiconductor wafer fabrication facility**
- o Developed/implemented on-line, computerized SPC tools for dimensioning analysis and control and pattern recognition;
 - o Coordinated people development, design-of-experiments;
 - o Managed chemical and physical analysis laboratories;

EXPERIENCE PROFILE (continued)

o Implemented control systems to assure product, process, material, equipment, and facility compliance, including Cost of Quality analysis.

'82 - '84 **Quality/Reliability Assurance and Engineering Manager, TI Singapore** assembly/test facility

o Developed, implemented, and operated an effective Quality/Reliability Assurance program for assembly processing including optical pattern recognition for equipment registration;

o Supervised 225 people for 7 day/week operation, including QRA, Computer Systems, and Training;

o Trained engineers in Solid State Physics, device fabrication, and statistical process control.

'81 - '82 **Engineering Operations Manager, TI Houston**

o Managed DRAM memory product cost center;

o Responsible for division test software generation, product assembly and test quality / yield, cost reduction and quality improvement;

o Provided technical customer interface for marketing;

o Coordinated TI Singapore engineering test/assembly.

'79 - '81 **Product Engineering Manager, TI Houston**

o Responsible for yield improvement, technical customer interface, quality improvement, design evaluation, and device characterization for DRAM and CCD products;

o Developed device specifications and test software.

'72 - '79 **Design Section Manager / Engineer, TI Houston**

o Responsible for design and development, process compatibility, production introduction of Dynamic Ram products;

EXPERIENCE PROFILE (continued)

o Activities included electrical and physical layout, SPICE model simulation, test program generation, and product implementation for MOS Dynamic Ram products.

1969 - 1972 **U. S. Army - Coventry, Rhode Island; Seoul, Korea**
Captain, Air Defense Artillery

- o Served one year as Communications Officer in Korea;
- o Served two years as Tactical Officer, New England Defense.

PROFESSIONAL ORGANIZATIONS AND AWARDS

- 1 - Institute of Electrical and Electronics Engineers, Inc. (IEEE), Senior Member. Societies: Computer, Electron Devices, Solid State Circuits
- 2 – Licensing Executives Society (LES)
- 3 – National Society of Professional Engineers
- 4 – Texas Board of Professional Engineers, Registered License #79454
- 5 - 2000/2001 Nationwide Register's Who's Who in Executives and Businesses
- 6 - 1996/1997 Strathmore's Who's Who Registry of Business Leaders

PUBLICATIONS

- 1- NUS Proceedings of Engineering Convention '83, Aug '83, pgs. 139-142, The Memory Challenge.
- 2- Archives of Biochemistry and Biophysics, Dec'81, Vol. 212, No. 2, Equilibrium Constants under Physiological Conditions for the Reactions of D-3-Phosphoglycerate Dehydrogenase and L-Phosphoserine Aminotransferase.
- 3- International Electron Devices Meeting, Dec '79, pgs. 355-357, Sub 100ns 16K x 1 MOS Dynamic RAM Using a Grounded Substrate.

EDUCATION PROFILE

1980 - 1985	Taught Solid State Device Physics, Semiconductor Processing, and Circuit Design Techniques
	Taught Statistical Quality Control methods
	Effectiveness Training and Japanese Manufacturing Techniques, Participative Problem Solving courses
1975 - 1976	1.5 years Graduate study in Neural Science, the University of Texas Graduate School of Biomedical Science
1965 - 1969	BSEE, North Carolina State University

PATENTS (US-25 Foreign-5)

4,239,993	High Performance Dynamic Sense Amplifier with Active Loads
4,280,070	Balanced Input Buffer Circuit for Semiconductor Memory
4,288,706	Noise Immunity in Input Buffer Circuit for Semiconductor Memory
4,370,575	High Performance Dynamic Sense Amplifier with Active Loads
4,418,293	High Performance Dynamic Sense Amplifier with Multiple Column Outputs
4,533,843	High Performance Dynamic Sense Amplifier with Voltage Boost for Row Address Lines
4,543,500	High Performance Dynamic Sense Amplifier Voltage Boost for Row Address Lines
4,543,501	High Performance Dynamic Sense Amplifier with Dual Channel Grounding Transistor
4,748,349	High Performance Dynamic Sense Amplifier with Voltage Boost for Row Address Lines

PATENTS (continued)

6,172,640 B1	Pet Locator
6,236,358 B1	Mobile Object Locator
6,421,001 B1	Object Locator
6,441,778 B1	Pet Locator
6,480,147 B2	Portable Position Determining Device
6,518,919 B1	Mobile Object Locator
6,771,213 B2	Object Locator
6,859,171 B2	Mobile Object Locator
7,113,126 B2	Portable Positioning Determining Device
7,179,674 B2	Bi-Directional Released-Beam Sensor
7,209,075 B2	Mobile Object Locator
7,324,044 B2	Object Locator
7,336,227 B2	Portable Position Determining Device
7,340,260 B2	System and Method for Tracking the Location of Multiple Mobile Radio Transceiver Units
7,353,706 B2	Weighted Released-Beam Sensor
7,397,097 B2	Integrated Released Beam Layer Structure Fabricated in Trenches and Manufacturing Method Thereof
JP84044720 B4	Semiconductor High Speed Read/Write Memory Unit
JP88053640 B4	Defect Resistant Semiconductor Memory Cell
DE2935121 C2	Clock Voltage Generator for Semiconductor Memory with Reduced Power Dissipation

PATENTS (continued)

- DE3043651 A1 Clock Voltage Generator for Semiconductor Memory with Reduced Power Dissipation
- GB2032211 B2 High Performance Dynamic MOS Read/Write Memory

CASES

Cases, in which I have signed a Protective Order, have testified as an expert either at a trial, hearing, or deposition, or have submitted statements / opinions, are:

CASE	CASE NUMBER	LOCATION	YEAR	TYPE ¹
Rambus v. Infineon ² (*firm: Kirkland & Ellis)	3-00CV524	Richmond, VA	2000 - 2005	P

(Patents related to RDRAM, synchronous clocks applied against SDRAMs)

*Micron v. Rambus (*firm: Weil Gotshal ..)	00-792-RRM	Wilmington, DE	2000 -	P ³
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(Patents related to RDRAM, synchronous clocks applied against SDRAMs)

Boss v. Bombardier [*] (*firm: Morgan & Finnegan)	H-00-3491	Houston, TX	2001 - 2005	P
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(Patents related to safety control system for snow and ski mobiles)

Apex* v. Raritan (*firm: Nixon & Vanderhye)	01-CV-4435 (MP)	New York, NY	2001- 2005	P
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(Patents related to video and data transmission, KVM control and OSD)

T-Netix* v. MCI/Global (*firm: McKool Smith)	2-01 CV 189 DF	Marshall, TX	2002 - 2003	P
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(Patents related to penal institution telephone communication control)

¹ P = Patent; C = Contract; TS = Trade Secret, AT = Antitrust

² * = Client

³ = Pending

CURRICULUM VITAE

Joseph C. M^cAlexander III

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
IEX* v. Blue Pumpkin (*firm: McKool Smith)	4:01CV16	Sherman, TX	2002 - 2005	P

(Patents related to penal institution telephone communication control)

Opti v. NSC* C02-02106 JF/RS San Jose, CA 2003 P
(*firm: McDermott
Will & Emery)

(Patents related to computer bus communication architecture)

Linear Technology v. C 94-1633 MHP San Francisco, CA 2003 - 2005 P
Micrel* (firm: Sidney (EDL)
Austin Brown & Wood)

(Patent related to integrated transistor drive circuit)

Philips v. CMT* 02-123 KAJ Wilmington, DE 2003 - 2004 P
(*firm: Ostrolenk Faber)

(Patents related to portable, wireless remote control systems)

Knipp v. Galasso* et al 153-191270-02 Tarrant County, TX 2003 P
(*firm: Shannon Gracey...)

(Patent Application related to thin film test and characterization equipment)

Dusan* v. Travellers Ins CV-S-01-0963 Las Vegas, NV 2003 - 2007 C
(*firm: Parsons)

(Insurance liability for damaged shipment)

Sandisk v. Infineon* C-03-02931 MJJ ND, CA 2004 - 2007 P
(*firm: Bartlit Beck)

(Patents related to IC design and architecture)

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
MoSys* v. Synopsis (*firm: Bingham McCutchen)	397-N	Wilmington, DE	2004	C
(Contract dispute case)				
Lexar* v. Toshiba (*firm: Weil Gotshal...)	CV812458	Santa Clara, CA	2004 - 2005	TS
(Trade Secret violation, misuse of IP)				
Lexar* v. Toshiba (*firm: Weil Gotshal...)	C 03-0167 MJJ	Santa Clara, CA	2004 - 2006	P
(Patents related to semiconductor memory system protocol and architecture)				
Toshiba v. Lexar* (*firm: Weil Gotshal...)	C 02-05273 MJJ	Santa Clara, CA	2004 - 2006	P
(Patents related to semiconductor memory system protocol and architecture)				
Lexar* v. Pretec et al (*firm: Weil Gotshal...)	C 00-4770 MJJ	Santa Clara, CA	2004 - 2007	P
(Patents related to semiconductor memory system protocol and architecture)				
Osram v. Dominant* (*firm: Hogan & Hartson)	337-TA-512	Wash, DC	2004	P
(Patents related to LED devices)				
Infineon* v. Mosaid (*firm: Kirkland & Ellis)	03-CV-4698 (WJM) 02-5772 (JF/RS)	NJ ND CA	2004 - 2005	P
(Patents related to semiconductor memory and memory control)				
STM* v. Broadcom (*firm: Sidley Austin...)	4:02 CV 362	ED, TX	2004	P
(Patents related to IC architecture)				

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
Mitutoyo* v. Central Purchasing (*firm: Oliff & Berridge)	03_C_0990	Chicago, IL	2004 - 2008	P
(Patents related to electronic calipers)				
Microunity v. Intel* (*firm: Weil Gotshal)	2-04CV120-TJW	Marshall, TX	2004 - 2005	P
(Patents related to microprocessors and memory)				
Avocent* v. ClearCube (*firm: Davidson Berquist...)	5:03-CV-2875	Huntsville, AL	2004 - 2006	P
(Patents related to computer video transmission and reception)				
Mosaid v. Infineon* (*firm: Kirkland & Ellis)	6:05CV120 (LED)	Tyler, TX	2005 - 2006	P
(Patents related to semiconductor memory and memory control)				
Antor* v. Nokia et al (*firm: Fulbright & Jaworski)	2:05-CV-186-DF	Marshall, TX	2005 -	P ³
(Patent related to download / streaming)				
Alt* v. Medtronic (*firm: Weil Gotshal...)	2 04CV370 LED	Marshall, TX	2005 - 2006	P
(Patents related to pacemakers and defibrillators)				
Micron* v. Tessera (*firm: Jones Day)	2:05-CV-319-LED	ED, TX	2005 - 2006	P
(Patents related to IC packaging)				

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
Rambus v. Samsung*	C 05 02298 WDB	San Jose, CA	2005 -	P ³
(*firm: Weil Gotshal...)				
(Patents related to RDRAM, synchronous clocks applied against SDRAMs)				
Rambus v. ... Samsung*	C 05 00334 EDL	San Francisco, CA	2005 -	P ³
(*firm: Weil Gotshal...)				
(Patents related to RDRAM, synchronous clocks applied against SDRAMs)				
Samsung* v. Rambus	1454-N	DE Chancery Court	2005 - 2007	C ³
(*firm: Weil Gotshal...)				
(Patents related to RDRAM, synchronous clocks applied against SDRAMs)				
Samsung* v. Rambus	3:05cv406	Richmond, VA	2005 - 2007	P
(*firm: Weil Gotshal...)				
(Patents related to RDRAM, synchronous clocks applied against SDRAMs)				
Toshiba v. Hynix*	304-CV-2391L	Dallas, TX	2005 - 2007	P
(*firm: Townsend and Townsend and Crew)				
(Patents related to semiconductor memory devices)				
KAI* v. Buck Knives	CV-05-0446 HA	Oregon	2005 - 2006	P
(*firm: Seed Law)				
(Patents related to knife mechanism)				
FormFactor v. Phicom*	05-6062-HO	Oregon	2005 -	P ³
(*firm: Mitchell Silberberg...)				
(Patents related to probe cards)				
Lexar* v. Fuji C	03-00355 MJJ	Santa Clara, CA	2006 - 2007	P
(*firm: Weil Gotshal...)				
(Patents related to semiconductor memory system protocol and architecture)				

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
Matsushita v. Samsung* (*firm: Akin Gump...)	02-336 (GEB)	New Jersey	2006	P
(Patents related to memory devices)				
Cobra v. BCNY* (*firm: Hogan & Hartson)	05-61225-CIV-MARRA	Ft Lauderdale, FL	2006 -	P ³
(Patents related to electronic flashing)				
VAC v. T-Netix* (*firm: Bell Nunnally...)	03-11399	Dallas, TX	2006 - 2008	C
(Patents related to communication control systems)				
Actel v. BTR* (*firm: McDermott Will & Emery)	1100046359	Arbitration	2006 - 2007	C
(Patents related to IC architecture)				
Omega* v. Fortin et al (*firm: Allen Dyer...)	6:05-CV-1113-ORL-22-DAB	Orlando, FL	2006 - 2007	P
(Patents related to remote start and security systems)				
Mosaid v. Micron* ... (*firm: Kirkland & Ellis)	2:06-CV-302-DF	ED, TX	2006 - 2009	P ³
(Patents related to memory devices)				
Mosaid v. ... PowerChip* (*firm: Trop ...)	2:06-CV-302-DF	ED, TX	2006 - 2008	P ³
(Patents related to memory devices)				
Mosaid v. ...Promos* (*firm: Akin Gump...)	2:06-CV-302-DF	ED, TX	2006 - 2008	P
(Patents related to memory devices)				

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
Promos* v. Mosaid (*firm: Akin Gump....)	C 06-05788 CS	ND, CA	2006 - 2008	P
(Patents related to memory devices)				
T-Netix* v. VAC (*firm: Bell Nunnally...)	3:05-CV-0654-D	ND, TX	2006 - 2008	P
(Patents related to communication control systems)				
TIP v. ...T-Netix* (*firm: Bell Nunnally...)	H-04-3718	SD, TX	2006 - 2007	P
(Patents related to telephone control systems)				
T-Netix* v. Global et al (*firm: Gruber Hurst...)	2-06cv-426-TJW	ND, TX	2006 - 2008	P
(Patents related to communication control systems)				
Nike* v. adidas (*firm: McDermott Will & Emery)	9:06-CV-43	ED, TX	2006 - 2007	P
(Patents related to measurement of movement)				
PhatRat v. NIKE* (*firm: Banner & Witcoff)	1220035678	Arbitration	2007	P
(Patents related to measurement of movement)				
Converse* v. ATI (*firm: Dickstein Shapiro)	50 494 T 00319 06	Arbitration	2007 - 2008	C ³
(Messaging control systems)				

CURRICULUM VITAE**Joseph C. M^EAlexander III**

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
ProBatter* v. Joyner (*firm: Hiscock & Barclay)	6:05-cv-02045	Arbitration	2007	P
(Baseball Video Sync)				
TIP v. SBC* (*firm: Bell Nunnally)	4:06-cv-00253	Houston, TX	2007 - 2008	P ³
(Patents related to telephone control systems)				
Avocet* v. Rose et al (*firm: Davidson Berquist)	C06-1711-MJP	Seattle, WA	2007 -	P ³
(Patents related to video and data transmission, KVM control and OSD)				
Samsung* v. Matsushita (*firm: Kirkland & Ellis)	6:07-CV-08 (LED)	Tyler, TX	2007 - 2008	P
(Patents related to IC process and design)				
MediaTek* v. Matsushita (*firm: Quinn Emanuel)	6:07-CV-08 (LED)	Marshall, TX	2007	P
(Patents related to PLL)				
Accton v. Centillium* (*firm: Farella Braun)	RG05245726	Alameda Cty, CA	2007	C
(Breach of contract)				
Fenner* v. Microsoft et al (*firm: Fulbright & Jaworski)	6:07-CV-08 (LED)	Tyler, TX	2007 -	P ³
(Patent related to joystick interface to low voltage port)				

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
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Freescale v. ProMOS*	4:06-CV-491 (RAS)	Sherman, TX	2007 - 2008	P ³
(*firm: Hogan & Hartson)				

(Patents related to memory access and bus termination)

Renatas v. Samsung*	07-54 (JJF)	DE	2007 - 2008	P
(*firm: Fish & Richardson)				

(Patent related to bus termination)

Renatas v. Samsung*	337-TA	ITC	2007	P
(*firm: Fish & Richardson)				

(Patent related to bus termination)

Symbol v. MetroLogic*	2:05-CV-509 (LED)	ED, TX	2007 - 2008	P
(*firm: McDermott Will & Emery)				

(Patents related to bar code)

Agere v. Samsung*	2-06-CV-185	ED, TX	2007 -	P ³
(*firm: Quinn Emanuel)	(TJW-CE)			

(Patent License Dispute)

Trontech* v. VTech	6:06-CV-451-LED	ED, TX (Tyler)	2008 -	P ³
(*firm: Wong Cabello)				

(Patents related to telephones)

DESA* v. EML	8-04-0160	MD TN, Nashville	2008 -	P ³
(*firm: Fitch Even)				

(Patent related to lighting)

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
Gemini v. LANDesk* (*firm: Davidson Berquist)	4:07-CV-00521	ND TX, Sherman	2008 -	P ³
(Patent related to Networks)				
DCS* v. McData (*firm: Haynes Boone)	3:06-CV-812-L	ND TX, Dallas	2008 -	C ³
(Breach of Contract)				
Bennett Marine v. Lenco* (*firm: Malen Haley)	04-cv-60326-KAM	SD FL, Ft Laud.	2008 -	P ³
(Patent related to Automated Boat Trim Retraction)				
Samsung* v. ON Semi (*firm: Kirkland & Ellis)	07-449 (JJF)	DE	2008 -	P ³
(Patents related to circuits and process)				
Orica* v. Austin Powder (*firm: McDermott Will & Emery)	CV-07-3337-AHM	CD CA,	2008 -	P ³
(Patents related to blasting electronic controls)				
FormFactor v. Phicom* (*firm: Finnegan, Henderson, F G & D)	337-TA-621	ITC	2008 -	P ³
(Patents related to probe cards)				
AMS* v. Crane & Seaga (*firm: Davidson Berquist)-	3:08-CV-0097-JPB	ND WVA, M..burg	2008 -	P ³
(Patents related to vending machines)				

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
Myriad v. Alltech, Inc.* (*firm: Duane Morris)	1:08-CV-00253-SS	WD TX, Austin	2008 -	TS ³
(Trade Secret & © related to software)				
SciCo v. Boston Scientific (*firm: Jeffer Mangels)	9:07-CV-00076-RHC	ED TX, Lufkin	2008 -	P ³
(Patent related to catheters)				
Renishaw* v. TESA (*firm: Oliff & Berridge)		ND IL, Eastern Div	2008 -	P ³
(Patents related to mfg probes)				
Samsung* v. Sandisk (*firm: Quinn Emanuel)			2008 -	P ³
(Patents related to integrated circuit devices)				
Rambus v. Micron* (*firm: Quinn Emanuel)	04-431105	SCCA, San Fran	2008 -	AT ³
(Antitrust claims)				
Harris* v. FedEx (*firm: Allen Dyer)	6:07-CV-1819-Orl- 28KRS	MD FL, Orlando	2008 -	P ³
(Patents related to ground based wireless communication)				
Omega* v. Lear (*firm: Allen Dyer)	6:07-CV-1422-Orl- 31DAB	MD FL, Orlando	2008 -	P ³
(Patents related to vehicle alert and remote start)				
Arbitron* v. Int'l Demographics (*firm: Dickstein Shapiro)	2:06-cv-434(TJW)	ED TX, Marshall	2008 -	P ³
(Patents related to measuring program audiences)				

Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
LSI-Agere v. NSC* (*firm: Weil Gotshal)	337-TA-648	ITC	2008 -	P ³
(Patents related to IC process and structure)				
Affinity Labs* v. BMW (*firm: Duane Morris)	9:08-CV-00164	ED TX, Lufkin	2008 -	P ³
(Patents related to portable audio player)				
Affinity Labs* v. Dice (*firm: Duane Morris)	9:08-CV-00163	ED TX, Lufkin	2008 -	P ³
(Patents related to portable audio player)				
Affinity Labs* v. Alpine (*firm: Duane Morris)	9:08-CV-00171	ED TX, Lufkin	2008 -	P ³
(Patents related to portable audio player)				
Fast Memory Erase v. Spansion* (*firm: Morrison Foerster)	3:08-CV-0977-M	ED TX,	2008 -	P ³
(Patents related to memory source erase)				

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Cases (continued)

CASE	CASE NUMBER	LOCATION	YEAR	TYPE
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT Application of: Confirmation No.: 6319
PERHOLTZ, Ronald J. Attorney Docket: 2540-0550
Appl. S.N.: 10/032,325 Group Art Unit: 2145
Filing Date: March 4, 2002 Examiner: CARDONE, Jason D.
SYSTEM AND METHOD FOR REMOTE
Title: **MONITORING AND OPERATION OF**
PERSONAL COMPUTERS Date: October 30, 2005

DECLARATION OF JOSEPH C. MCALEXANDER III UNDER 37 C.F.R. § 1.132

I, Joseph C. M^cAlexander ^{III}, hereby declare as follows:

1. I have been asked by counsel for the assignee of the above-referenced application to provide my analysis and opinions regarding certain matters raised by the March 31, 2005 Office Action. Specifically, I have been asked to assess applicants' response to the written description rejections raised in that Office Action. Applicants' response was filed on September 30, 2005.

I. QUALIFICATIONS

2. I am a registered Professional Engineer and hold a Bachelor of Science degree in Electrical Engineering from North Carolina State University. I have been associated with the electronics and integrated circuit industries as a designer and consultant for the last 33 years and have been awarded seventeen U.S. Patents and a number of foreign patents for my contributions. A more detailed account of my work experience and other qualifications is listed in my curriculum Vitae attached as Exhibit A to this declaration.

Appln. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

II. BASIS OF OPINIONS FORMED

3. In preparing this declaration, I have reviewed and considered U.S. Patent No. 5,732,212 ("the '212 patent") which is the basis of the present reissue application, the March 31, 2005 Office Action, and applicants' September 30, 2005 Response. I have also relied on my education, experience, and knowledge of basic engineering practices in the industry as well as my understanding of the applicable legal principles describe below. My opinions are based in part on study of those documents, materials, knowledge and experience.

III. LEVEL OF ORDINARY SKILL IN THE ART

4. I understand that factors such as the education level of those working the field, the sophistication of the technology, the types of problems encountered in the art, prior art solutions to those problems, and the speed at which innovations are made may establish the level of skill in the art. In my opinion, a person of ordinary skill in the art at the time the present invention was made would have a bachelors degree in electrical engineering, or the equivalent education, with about 5 years of technical experience in component design or integration of components into systems relating to the transmission, reception, coding/decoding, formatting/reformatting of computer signals.

IV. APPLICABLE LEGAL STANDARDS

5. I understand that the written description requirement is satisfied when the specification conveys, with reasonable clarity, to those skilled in the art, that, as of the filing date, the applicant was in possession of the claimed subject matter. How the specification accomplishes this is not material. Moreover, I understand that the specification does not need to

Appln. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

set forth the details of descriptions or procedures that are obvious to one of ordinary skill in the art.

6. I also understand that the exact words used in the claim do not have to appear in the specification in order to satisfy the written description requirement. In fact, it is my understanding that the failure of the specification to specifically mention a limitation that later appears in the claims is not a fatal one when one skilled in the art would recognize, upon reading the specification, that the new language reflects what the specification shows has been invented.

**V. OPINIONS REGARDING THE WRITTEN DESCRIPTION REQUIREMENT
FOR APPLICATION CLAIMS 123-128, 136-140, 144-162, 165-170, 172-183, 186-
190 AND 193-210**

7. Based on the foregoing, it is my opinion that elements of claims 123-128, 136-140, 144-162, 165-170, 172-183, 186-190 and 193-210, identified in the March 31, 2005 Office Action, do reflect what the specification shows has been invented and thus the written description requirement is met. It is further my opinion that the specification conveys, with reasonable clarity, that, as of the filing date, the applicant was in possession of the claimed subject matter. In the September 30, 2005 Response, applicants' cited to various portions of the '212 patent's specification as support for their argument that the '212 specification describes the claim elements identified in the Office Action. I have conducted my own review of the Office Action and the Applicants' Response. Based on that review, in conjunction with the legal standards identified above, I agree with the applicants that the '212 patent specification adequately describes those claim elements, satisfying the written description requirement.

8. The following paragraphs provide the written description support for each of the elements and limitations identified in the Office Action as having failed to comply with the

Appln. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

written description requirement. These are the same portions of the specification identified in the September 30, 2005 Response.

Claim 123: “operation of the remote input device in response to the menu of the pop-up screen causes the remote site to terminate the first connection and to establish a second connection.”

9. The Office Action states that “[t]he specification discloses the pop up menu but does not disclose pop-up screen causes the remote site to terminate the first connection and to establish a second connection.” But this misapprehends the limitation that is the subject of the rejection. The claim states that “operation of the remote input device” in response to the menu causes the termination of the first connection and establishment of the second connection. This is different from the menu causing the termination and establishment of connections. Written description support for this limitation appears, for example, at cols. 49:64-50:2; 44:22-29; 44:1-2; and Figs. 1 and 7. These passages and associated figures show how a menu prompts a user to switch to a new host site by, inter alia, terminating the first connection to the first host site and establishing a second connection to a second host site.

Claim 136: “a remote access facility”

10. Written description support for this limitation appears, for example, at cols. 11:34-37; 12:40-53; 12:54-13:4; and Fig. 1. The cited portions of the specification describe how the remote access facility can be, for example, a combination of hardware and software.

Claim 136: “non-dedicated” channel

11. Written description support for this limitation appears, for example, at cols. 6:6-14; 6:26-37; 6:54-57; 10:34-40; 11:34-37 and Fig. 1. The cited portions of the specification describe a dedicated channel as one that is capable of only carrying data between a Remote PC

Appn. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

and a Host Unit. The specification gives preferred examples of non-dedicated channels such as telephone lines or any other communications network.

Claims 157 and 160: a “reset operation”

12. Written description support for this limitation appears, for example, at cols. 6:66-7:2; 10:29-33; 20:48-59; 21:22-22:2; 33:9-16; 49:41-57; and Figs. 4A, 4E, 5A, and 7C. The cited portions of the specification describe, *inter alia*, a preferred implementation of a reset operation as one in which the AC power is interrupted to a Host PC causing the Host PC to perform a cold boot.

Claims 157 and 160: a “reset command”

13. Written description support for this limitation appears, for example, at cols. 6:66-7:2; 10:29-33; 20:48-59; 21:22-22:2; 33:9-16; 49:41-57; and Figs. 4A, 4E, 5A, and 7C. The specification describes how the selection of a menu option causes a command to be received by a Host Unit, which in turn interrupts AC power to a Host PC.

Claim 165: “packetize”

14. Written description support for this limitation appears, for example, at cols. 17:12-19; 17:53-56; 26:15-45; 32:60-33:8; 53:52-54:35; 55:7-31; and Fig. 8. These passages, and the associated figures, describe, *inter alia*, how analog video signals which have been digitized are sent as packets to the remote PC.

Claim 169: “target” computer

15. Claim 169 recites “[a] system for controlling a target computer from a remote workstation of the type that includes a remote keyboard, a mouse, and a monitor, . . .” Thus, the context of the claim itself makes it clear that the “target” computer is one of the various Host PCs disclosed throughout the specification as part of the preferred embodiments. Figure 1 shows

Appln. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

this arrangement graphically. The remote workstation corresponds to components at the remote site of Figure 1. One of the principle purposes of the present application is the ability to control a computer from a remote workstation. Thus, referring to the embodiment shown in Figure 1, the "target" computer would be one of the Host PCs 10, 16 or 20.

Claim 169: "video digitizer"

16. Written description support for this limitation appears, for example, at cols. 12:54-13:4; 13:46-58; 22:56-23:10; 23:64-24:9; 24:26-54; 25:48-26:14; and Figs. 4A, 4G, 4H, and 4K. The specification explains how circuitry in the Host Unit can convert analog video signals to digitized video signals/information.

Claim 177: "video digitizer"

17. Written description support for this limitation appears, for example, at cols. 12:54-13:4; 13:46-58; 22:56-23:10; 23:64-24:9; 24:26-54; 25:48-26:14; and Figs. 4A, 4G, 4H, and 4K. The specification explains how circuitry in the Host Unit can convert analog video signals to digitized video signals/information.

Claim 177: "synchronize detect circuit"

18. Written description support for this limitation appears, for example, at cols. 23:1-10; 29:57-30:17 and Figs. 4A and 4P. This circuitry detects vertical and horizontal synchronize signals from an analog video signal.

Claim 177: "clocking rate"

19. Written description support for this limitation appears, for example, at cols. 22:15-30; 22:56-61; 29:28-56; 40:9-43:67; and Figs. 4A, 4O, and 6. These passages describe how, in a preferred embodiment, the Video CPU corresponds to the microprocessor that

Appln. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

determines a clocking rate used to sample the analog video signals. The Figure 4O circuitry corresponds to one embodiment of the clock signal generator that produces a clock signal.

Claim 177: "converter"

20. Written description support for this limitation appears, for example, at cols. 12:54-13:4; 13:46-58; 22:56-23:10; 23:64-24:9; 24:26-54; 25:48-26:14; and Figs. 4A, 4G, 4H, and 4K. The specification explains how circuitry in the Host Unit can convert analog video signals to digitized video signals/information.

Claim 186: "network access device"

21. In part, claim 186 recites a system in which a "network access device" interfaces with a network that includes a plurality of computer processors and a selected computer. The selected computer is a computer that will receive keyboard signals and generate video signals. The selected computer is one that is listed on a menu of a video monitor associated with the keyboard signals. Thus, the full context of claim 186 makes it clear that a preferred implementation of the "network access device" is a Host Unit 8. Written description support for this limitation appears, for example, at cols. 5:67-6:2; 6:15-19; 6:26-37; 7:42-47; 11:43-50; 44:22-29; 49:58-50:14; and Fig. 1.

Claim 193: "hardware host unit"

22. In part, claim 193 recites a "hardware host unit" coupled to a host computer that is different from the hardware host unit. In one of the preferred embodiments, this hardware host unit is Host Unit 8, 13, or 18. Each such Host Unit is a hardware host unit that is coupled to a host computer (*i.e.*, Host PC 10, 16, or 20, respectively). Written description support for this limitation appears, for example, at cols. 5:17-23; 5:42-58; and Fig. 1.

Appln. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

Claim 193: “remote computer software utility”

23. In part, claim 193 recites a “remote computer software utility” located at a remote site computer. In one preferred embodiment, this software utility corresponds to a set of software operating on a Remote PC 2. Written description support for this limitation appears, for example, at cols. 5:17-23; 6:6-14; 6:54-57; 7:7-9; 44:12-29; and Figs. 1 and 7A.

Claim 194: “converter”

24. Written description support for this limitation appears, for example, at cols. 12:54-13:4; 13:46-58; 22:56-23:10; 23:64-24:9; 24:26-54; 25:48-26:14; and Figs. 4A, 4G, 4H, and 4K. The specification explains how circuitry in the Host Unit can convert analog video signals to digitized video signals/information.

Claim 204: video raster signal “independently”

25. In part, claim 204 recites a method step of converting a video raster signal into a digital signal, where the converting step occurs “independently” of the data processing device that generated the video raster signal. In a preferred embodiment described in the specification, the Host Unit 8, 13, and 18 perform such a conversion step independently of the Host PCs 10, 16, and 20. Written description support for this limitation appears, for example, at cols. 12:54-13:4; 13:46-58; 22:56-23:10; 23:64-24:9; 24:26-54; 25:48-26:14; and Figs. 4A, 4G, 4H, and 4K.

VI. CONCLUSION

26. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the

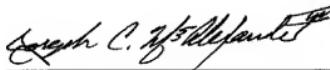
Appn. of: PERHOLTZ, Ronald J.

Serial No.: 10/032,325

Filed: March 4, 2002

United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: October 30, 2005



Joseph C. M^sAlexander III

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

(x). RELATED PROCEEDINGS APPENDIX

No related proceedings.

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

(xi). APPENDIX OF CLAIM CHANGES REFUSED ENTRY

169. (Unentered Amendment) A system for controlling a target computer from a remote workstation of the type that includes a keyboard, a mouse, and a monitor, comprising:

a host processor and associated video memory and keyboard/mouse buffers;

a video digitizer coupled to the host processor that receives analog video signals from the target computer, samples the video signals, and stores the video signals in the video memory;

a keyboard/mouse interface that receives keyboard and mouse signals from the remote workstation and stores them in the keyboard/mouse buffers; and

the host processor operating a remote access and control program that transmits the contents of the video memory to the remote workstation and receives the contents of the keyboard/mouse buffers from the remote workstation [target computer], both over a communication link.

170. (Unentered Amendment) The system of claim 169, wherein [the host computer receives the keyboard and mouse signals from the remote workstation, stores the received keyboard and mouse signals in the buffers and forwards] the contents of the keyboard/mouse buffers are forwarded to a keyboard and mouse input on the target computer.

193. (Unentered Amendment) A system, comprising:

a hardware host unit coupled to a host computer different from the hardware host unit; and

a remote computer software utility, located at a remote site computer, comprising:

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a connection utility to establish a communication session with the host unit over a communication link; and

a pop up menu utility providing at least a user choice at the remote site computer to obtain access to the host computer via the connection [communication] utility.

198. (Unentered Amendment) The system according to claim 195, wherein said digital codes are transmitted to a a [said] remote location in response to a command received from said remote location requesting that said digital codes be transmitted.

211. (Unentered Amendment) A circuit module for a computer having in operation therein a remote access engine to communicate between a host server and a remote workstation, comprising:

a main CPU to coordinate a analog to digital [to analog] conversion of host video signals from the host server;

a field programmable gate array, in communication with the main CPU;

a video interface circuit, in communication with the field programmable gate array, to capture the host video signals for the main CPU and field programmable gate array;

a video RAM to store host video signals digitized by the main CPU and field programmable gate array, and to deliver the digitized video signals to the remote access engine for delivery to the remote computer, the video RAM in communication with the field programmable gate array to receive at least video sync processing from the field programmable gate array;

at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a bus controller, in communication with the field programmable gate array, to communicate information identifying the digitized host video signals and the mouse and keyboard information to the remote access engine.

212. (Unentered Amendment) A remote access system communicating with a digital network transmission medium to communicate user input signals from a remote computer to a host computer via the transmission medium and video signals from the host computer to the remote computer via the transmission medium, comprising:

a user input process to capture the user input signals for digital transmission to the host computer;

a video process to capture the video [input] signals, digitize them and format them for transmission to the remote computer, even when the host computer has locked up to no longer accept any user input signals;

a standard remote access engine;

to communicate the user input signals on the transmission medium between the host and remote computers, and

to communicate the video signals, in digital format, on the transmission medium between the host and remote computers, even when the host computer has locked up to no longer accept any user input signals.

220. (Unentered Amendment) A computer having a virtual path communication link with a remote computer over a network medium, comprising:

a remote access engine;

a data bus;

a set of circuit modules in communication with a set of corresponding host computers to receive analog video signals from the corresponding host computers, to

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

digitize the analog video signals, to synchronize the video signals to a video display characteristic of the remote computer, and to present the digitized and synchronized video signals to the data bus;

a communication port establishing a network connection via the network medium for [between] the remote access engine and a selected one of said set of circuit modules to receive the digitized and synchronized video signals and to deliver the selected digitized video signals to the remote computer for display.

221. (Unentered Amendment) A computer according to claim 220, wherein:
each circuit module includes:

a main CPU to coordinate a analog to digital [to analog] conversion of host video signals from a corresponding host computer;

a field programmable gate array, in communication with the main CPU;

a video interface circuit, in communication with the field programmable gate array, to capture the host video signals for the main CPU and field programmable gate array;

a video RAM to store host video signals digitized by the main CPU and field programmable gate array, and to deliver the digitized video signals to the remote access engine for delivery to the remote computer, the video RAM in communication with the field programmable gate array to receive at least video sync processing from the field programmable gate array;

at least one of a mouse driver circuit and a keyboard driver circuit, in communication with the main CPU, to receive, respectively, mouse and keyboard information from the remote computer;

Application of: Perholtz, R. and Elmquest; E.
Serial No. 10/032,325
Attorney Docket No. 2540-0550

a bus controller, in communication with the field programmable gate array, to communicate information identifying the digitized host video signals and the mouse and keyboard information to the remote access engine.